

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[OAR-2002-0035; FRL- -]

RIN 2060-AG66

**National Emission Standards for Hazardous Air Pollutants:
Asphalt Processing and Asphalt Roofing Manufacturing**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for existing and new asphalt processing and asphalt roofing manufacturing facilities. The EPA has identified asphalt processing and asphalt roofing manufacturing facilities as major sources of hazardous air pollutants (HAP) such as formaldehyde, hexane, hydrogen chloride (HCl), phenol, polycyclic organic matter (POM), and toluene. The final standards will implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). The total HAP reduction resulting from compliance with the rule is expected to be 86 megagrams per year (Mg/yr).

A variety of HAP are emitted from asphalt processing

and asphalt roofing manufacturing source categories. The following HAP account for the majority (approximately 98 percent, based on the emission factors developed for the final rule) of the total HAP emissions: formaldehyde, hexane, HCl (at asphalt processing facilities that use chlorinated catalysts), phenol, and toluene. The remaining two percent of the total HAP emissions is a combination of several different organic HAP, each contributing less than 0.5 percent to the total HAP emissions.

EFFECTIVE DATE: [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

ADDRESSES: The official public docket is the collection of materials that is available for public viewing at the Office of Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC.

FOR FURTHER INFORMATION CONTACT: For information concerning applicability and rule determinations, contact your State or local representative or appropriate EPA Regional Office representative. For information concerning rule development, contact Rick Colyer, Minerals and Inorganic Chemicals Group, Emission

Standards Division (C504-05), U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5262, electronic mail address, colyer.rick@epa.gov.

SUPPLEMENTARY INFORMATION:

Regulated Entities. Categories and entities potentially regulated by this action:

TABLE 1. REGULATED CATEGORIES AND ENTITIES

Category	NAICS ^a		SIC ^b	
	Code	Description	Code	Description
Manufacturing	324122	Asphalt shingle and coating materials manufacturing	2952	Asphalt felts and coatings
Manufacturing	32411	Petroleum refineries	2911	Petroleum refining
Federal Government	Not affected		Not affected	
State/Local/Tribal Government	Not affected		Not affected	

^aStandard Industrial Classification Code

^bNorth American Information Classification System

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine

the applicability criteria in §§63.8681 and 63.8682 of the final rule. If you have any questions regarding the applicability of this action to a particular entity, contact the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

Docket. The EPA has established an official public docket for this action under Docket ID No. OAR-2002-0035. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. The official public docket is the collection of materials that is available for public viewing at the Office of Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742. A

reasonable fee may be charged for copying docket materials.

Electronic Docket Access. You may access the final rule electronically through the EPA Internet under the "Federal Register" listings at <http://www.epa.gov/fedrgstr/>.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility in the above paragraph entitled "Docket." Once in the system, select "search," then key in the appropriate docket identification number.

Certain types of information will not be placed in the EPA Dockets. Information claimed as CBI and other information whose disclosure is restricted by statute, which is not included in the official public docket, will

not be available for public viewing in EPA's electronic public docket. The EPA's policy is that copyrighted material will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. To the extent feasible, publicly available docket materials will be made available in EPA's electronic public docket. When a document is selected from the index list in EPA Dockets, the system will identify whether the document is available for viewing in EPA's electronic public docket. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility previously identified.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of the final rule is also available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the final rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address: <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the

TTN is needed, call the TTN HELP line at (919) 541-5384.

Judicial Review. The NESHAP for asphalt processing and asphalt roofing manufacturing was proposed on November 21, 2001 (66 FR 58610). Under section 307(b)(1) of the CAA, judicial review of the NESHAP is available by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT THE DATE 60 DAYS AFTER PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER]. Only those objections to the rule that were raised with reasonable specificity during the period for public comment may be raised during judicial review.

Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final rule may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

Background Information Document. The EPA proposed the NESHAP for asphalt processing and asphalt roofing manufacturing on November 21, 2001 (66 FR 58610) and received 21 comment letters on the proposal. In response to the public comments, EPA adjusted the final NESHAP where appropriate. A background information document (BID) ("National Emission Standards for Hazardous Air Pollutants, Asphalt Processing and Asphalt Roofing

Manufacturing, Summary of Public Comments and Responses," February 2003, EPA-453/R-03-005) containing EPA's responses to each public comment is available in Docket No. OAR-2002-0035.

Outline. The information presented in the preamble is organized as follows:

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I. Background

A. What is the statutory authority for the final NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP emissions and to establish NESHAP for the listed source categories and subcategories. A major source of HAP is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit, considering controls, in the aggregate, 9.1 Mg/yr (10 tons per year (tpy)) or more of any single HAP or 22.7 Mg/yr (25 tpy) or more of any combination of HAP. Based on the emissions data collected for this rulemaking, asphalt processing and asphalt roofing manufacturing

facilities have the potential to be major sources of HAP.

The EPA listed asphalt processing and asphalt roofing manufacturing categories of major sources as separate source categories on July 16, 1992 (57 FR 31576). However, because these processes are closely related and are often collocated, we are regulating emissions from both source categories under a single NESHAP.

B. What criteria were used in the development of NESHAP?

Section 112(c)(2) of the CAA requires that we establish NESHAP for control of HAP from both existing and new major sources, based upon the criteria set out in section 112(d). The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable, taking into consideration the cost of achieving the emission reduction, any non-air quality health and environmental impacts, and energy requirements. This level of control is commonly referred to as the MACT.

The minimum control level allowed for NESHAP (the minimum level of stringency for MACT) is the so-called "MACT floor," as defined under section 112(d)(3) of the CAA. The MACT floor for existing sources is the emission

limitation achieved by the average of the best-performing 12 percent of existing sources for categories and subcategories with 30 or more sources, or the average of the best-performing five sources for categories or subcategories with fewer than 30 sources. For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source.

In developing the final NESHAP, we considered control options that are more stringent than the MACT floor (so-called beyond-the-floor control options), taking into consideration the cost of achieving the emission reductions, and any non-air quality health and environmental impacts, and energy requirements.

In the final rule, the EPA is promulgating standards for both existing and new sources consistent with these statutory requirements.

C. What operations constitute asphalt processing and asphalt roofing manufacture?

The final rule regulates both asphalt processing and asphalt roofing manufacturing operations. Asphalt processing and asphalt roofing manufacturing operations can be stand-alone or integrated with each other, or with

related operations such as wet-formed fiberglass mat manufacturing. In addition, asphalt is processed at some petroleum refineries.

Processed asphalt is produced using asphalt flux as the raw material. Asphalt flux is a product that is obtained in the last stages of fractional distillation of crude oil. Asphalt is processed to change its physical properties for use in various end products (e.g., paving applications, roofing products). In asphalt processing, heated asphalt flux is taken from storage and charged to a heated blowing still where air is bubbled up through the flux. This process raises the softening temperature of the asphalt. The blowing process also decreases the penetration rate of the asphalt when applied to the roofing substrate. Some processing operations use a catalyst (e.g., ferric chloride, phosphoric acid) in the blowing still to promote the oxidation of asphalt. The need to use catalyst is primarily driven by the type of feedstock used. Certain low-quality feedstocks (which are used, however, by necessity because substitute feedstocks are not available, see 66 FR 58619) require catalyst to be used to attain desired product specifications.

In asphalt roofing manufacturing, processed or modified asphalt (also called modified bitumen) is applied to a fibrous substrate (typically made of fiberglass or organic felt) to produce the following types of roofing products: shingles, laminated shingles, smooth-surfaced roll roofing, mineral-surfaced roll roofing, and saturated felt roll roofing. Modified asphalt is asphalt that is mixed with polymer modifiers (which add strength and durability to the asphalt) and is typically used to produce roll roofing products. A roofing manufacturing line is a largely continuous operation, with line stoppages occurring primarily due to breaks in the substrate.

In asphalt roofing manufacturing, asphalt is typically mixed with filler materials before application to the substrate. If a fiberglass substrate is used, coating asphalt is applied by a coater. If an organic substrate is used, a saturator and wet looper are typically used prior to the coater to provide additional time for the asphalt to impregnate the substrate. The type of final product being manufactured determines the process steps that follow the coating or impregnation steps.

For shingles and mineral-surfaced roll roofing, granules are applied to the hot surface of the coated substrate. This step is omitted in manufacture of smooth-surfaced and saturated felt roll roofing. In shingle manufacturing, a strip of sealant (typically oxidized or modified asphalt) is applied to the back of the product after it has cooled. This sealant strip, which is heated by the sun after the roofing product is installed, provides some adhesion and sealing between layers of roofing product. In shingle manufacture, the coated substrate is cut into the desired size. Multiple single-ply shingles can be glued together (typically using oxidized or modified asphalt as an adhesive) to produce laminated or dimensional shingles. When asphalt roofing manufacturing lines are collocated with asphalt processing operations, the two operations typically share storage and process tanks.

D. What are the HAP emissions and HAP emission sources?

Asphalt is essentially the material that remains after fractional distillation of crude oil, with petroleum coke being the only other fraction available for recovery. Consequently, asphalt consists primarily of heavy organic compounds with low boiling points.

Hazardous air pollutants are volatilized from asphalt as it is heated and agitated during processing and roofing manufacturing operations. Hazardous air pollutants are also volatilized during asphalt processing as a result of the oxidation reactions that occur in the blowing still.

Because the HAP volatilized from asphalt generally have low boiling points, they can be present in both condensed particulate matter (PM) and gaseous forms, depending on the temperature of the vent or exhaust gas. When the temperature of the vent gas is below the boiling point of a HAP, the HAP will condense into particulate form (i.e., a cooler vent gas will have more HAP in the form of condensed PM, whereas a hotter vent stream will contain mostly gaseous HAP).

The following types of equipment are sources of PM HAP and gaseous HAP emissions: asphalt storage and process tanks, asphalt blowing stills, asphalt loading racks, saturators, wet loopers, coating mixers, coaters, sealant applicators, and adhesive applicators. The majority of uncontrolled HAP emissions from an asphalt processing and asphalt roofing manufacturing facility (approximately 50 percent, based on the emission factors developed for this rulemaking) are contributed by the

blowing stills, followed by the process equipment used to apply asphalt to the roofing substrate (e.g., coating mixers, saturators, wet loopers, and coaters). Asphalt processing operations can also be sources of HCl, if a chlorinated catalyst is introduced into the blowing still during processing. Since most blowing still emissions are controlled by a combustion device, chlorine compounds present in the blowing still exhaust are oxidized and emitted as HCl from the blowing still combustion device outlet.

E. What are the health effects associated with the HAP emitted from the asphalt processing and asphalt roofing manufacturing source categories?

A variety of HAP are emitted from asphalt processing and asphalt roofing manufacturing source categories. The following HAP account for the majority (approximately 98 percent, based on the emission factors developed for this rulemaking) of the total HAP emissions: formaldehyde, hexane, HCl (at asphalt processing facilities that use chlorinated catalysts), phenol, and toluene. The remaining two percent of the total HAP emissions is a combination of several different organic HAP, each contributing less than 0.5 percent to the total HAP

emissions.

The HAP emitted from these source categories (controlled under the final rule) are associated with a variety of adverse health effects. These adverse health effects include both chronic health disorders (e.g., irritation of the lung, skin, and mucous membranes, effects on the central nervous system, and damage to the blood and liver) and acute health disorders (e.g., respiratory irritation and central nervous system effects such as drowsiness, headache, and nausea). The EPA has classified two of the HAP (formaldehyde and POM) as probable human carcinogens.

The EPA does not have the type of current detailed data on each of the facilities and the people living around the facilities covered by today's rule for this source category that would be necessary to conduct an analysis to determine the actual population exposures to the HAP emitted from these facilities and the potential for resultant health effects. Therefore, EPA does not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, and this rule reduces emissions,

subsequent exposures would be reduced.

F. What was the basis for the proposed standards?

The EPA proposed standards for the HAP-emitting equipment at the two affected sources: each asphalt processing facility (blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and asphalt loading racks) and each asphalt roofing manufacturing line (saturator, a wet looper, a coater, coating mixers, sealant applicators, adhesive applicators, and associated storage tanks).

The EPA determined the MACT floors for existing and new sources for each type of process equipment used in asphalt processing facilities and in asphalt roofing manufacturing lines. For each equipment type, the equipment pieces were ranked in order of level of control. Combustion devices were ranked over PM control devices because combustion devices reduce both gaseous HAP and condensed HAP.

At proposal, a combustion device operating at or above 1200 °F was the basis for the MACT floor for blowing stills, asphalt storage tanks with a capacity of 1.93 megagrams or greater, and loading racks at existing, new, and reconstructed affected sources. Blowing stills that

use a chlorinated catalyst produce a vent stream that contains chlorinated organic compounds. When this vent stream is sent to a combustion device, the chlorinated organic compounds are oxidized to HCl which is a HAP. Because requiring facilities to use non-chlorinated catalysts is not feasible due to the need to produce oxidized asphalt of a given quality (see generally 66 FR 58618), and because no facilities control HCl emissions, the proposed MACT floor for HCl emissions from blowing stills using catalyst was based on no control of those emissions.

With the exception of asphalt storage tanks, the MACT floor for equipment at existing asphalt roofing manufacturing lines (coaters, saturators, wet loopers, coating mixers and sealant and adhesive applicators) was based on a PM control device complying with the new source performance standards (NSPS) for asphalt processing and roofing manufacture (asphalt NSPS) (40 CFR part 60, subpart UU) PM emission limits. The floor for saturators, coaters, and coating mixers at new and reconstructed affected sources was based on a combustion device operating at or above 1200 °F. For wet loopers at existing, new, and reconstructed affected sources, the

MACT floor was based on a PM control device that achieves the asphalt NSPS PM emission limits. For storage tanks with capacity of 1.93 megagrams or greater at existing, new, and reconstructed asphalt roofing manufacturing lines, the MACT floor was based on a combustion device operating at or above 1200 °F.

The EPA evaluated potential options for achieving emission reductions more stringent than the floor (beyond-the-floor options) for three groups of equipment: (1) saturators, wet loopers, coaters, coating mixers, and sealant and adhesive applicators at existing sources; (2) blowing stills that use a chlorinated catalyst at existing, new, and reconstructed sources; and (3) wet loopers at new and reconstructed sources. For all other equipment (blowing stills, loading racks, and storage tanks at existing, new, and reconstructed sources; and for saturators, coaters, coating mixers, and sealant and adhesive applicators at new and reconstructed sources), there are no known technologies in use at asphalt processing or roofing manufacturing facilities or similar sources that would be capable of achieving a greater emission reduction than a combustion device operating with a minimum operating temperature of 1200 °F. Thus,

EPA did not consider beyond-the-floor options for these types of equipment.

For saturators, wet loopers, coating mixers, coaters, and sealant and adhesive applicators at existing affected sources, the level of control achieved by a combustion device with a minimum operating temperature of 1200 °F was identified as the only beyond-the-floor option. However, due to the cost per megagram of HAP reduction (\$616,000) and the increase in criteria pollutant emissions, requiring the level of control achieved by a combustion device for saturators, wet loopers, coaters, coating mixers, and sealant and adhesive applicators at existing sources was not a justifiable option.

For blowing stills that use chlorinated catalysts, emissions of HCl can be reduced by a gas scrubber using caustic scrubbing media. However, since gas scrubbing has not been demonstrated as an effective technology for controlling HCl emissions from asphalt processing and due to the potentially high cost per megagram of HCl reduced (\$23,900), the additional cost of going beyond-the-floor was not warranted. Nor is process substitution a viable option for controlling HCl emissions, as noted above.

Therefore, the MACT for HCl emissions from blowing stills using catalyst was based on no emission reduction. For wet loopers, EPA considered the level of control of a combustion device operating at a minimum of 1200 °F as a beyond-the-floor option. Because controlling wet loopers at new affected sources was expected to add minimal if any cost to the total control cost, the MACT for wet loopers at new or reconstructed affected sources was based on a combustion device operating at a minimum of 1200 °F. See generally 66 FR 58618-621 and the memorandum "Documentation of Existing and New Source Maximum Achievable Control Technology (MACT) Floors for the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asphalt Processing and Asphalt Roofing Manufacturing" (Docket No. OAR-2002-0035).

With the exception of standards for certain tanks and loading racks, EPA is adopting all of these standards (and analysis) in the final rule.

II. Summary of the Final Standards

A. Does the final NESHAP apply to me?

The final rule applies to you if you process asphalt (at stand-alone facilities or collocated with asphalt roofing manufacturing facilities or petroleum refineries)

or manufacture asphalt roofing products at a facility that is a major source of HAP emissions. Major sources of HAP are those that emit or have the potential to emit at least 10 tpy of any one HAP or 25 tpy of any combination of HAP. All HAP emission sources at a facility, not just those related to asphalt processing or roofing manufacture, must be considered in determining major source status. Put another way, the final rule may apply to you even if the HAP emissions from your asphalt roofing products manufacturing and asphalt processing operations do not themselves exceed the major source threshold levels given above. If your facility is determined to be an area source (i.e., not a major source), you would not be subject to the final rule.

For the storage tanks at asphalt processing and asphalt roofing manufacturing facilities regulated by the final NESHAP, the potential exists for these tanks to already be subject to an existing emission standard: the petroleum refinery NESHAP (40 CFR part 63, subpart CC), or standards of performance for volatile organic liquid storage vessels (40 CFR part 60, subparts K, Ka, and Kb). Storage tanks that are subject to those standards are not subject to the requirements of the asphalt rule since the

control requirements specified by those standards for fixed roof storage tanks (used in the asphalt processing and asphalt roofing manufacturing industry) are as stringent as the standards specified in the asphalt rule, and so regulation of these tanks under the asphalt rule would be duplicative, imposing costs without any environmental benefit.

The EPA also recognizes that asphalt storage tanks, blowing stills, saturators, wet loopers, and coaters at asphalt processing and asphalt roofing manufacturing facilities could be subject to both the final NESHAP and the asphalt NSPS. In cases where the requirements of the rules overlap, the final rule specifies that facilities are required to comply only with the asphalt NESHAP. However, any storage tank with a capacity less than 1.93 megagrams that is subject to the asphalt NSPS but not regulated under the asphalt NESHAP must comply with the asphalt NSPS.

Another instance where we are excluding equipment involved in asphalt roofing manufacturing from the final rule, due to regulatory overlap involves, wet-formed fiberglass mat production. Although wet-formed fiberglass mat is produced at both stand-alone facilities

and those collocated with asphalt processing and roofing facilities, HAP emissions from wet-formed fiberglass mat manufacturing processes are regulated by another NESHAP (40 CFR part 63, subpart HHHH).

The final rule does not regulate asphalt processing and asphalt roofing manufacturing equipment that is used solely for research and development activities.

B. What are the affected sources?

The two affected sources are defined as each asphalt processing facility and each asphalt roofing manufacturing line. An asphalt processing facility consists of one or more asphalt flux blowing stills, asphalt flux storage tanks storing asphalt flux intended for processing in the blowing stills, oxidized asphalt storage tanks, and oxidized asphalt loading racks. An asphalt roofing manufacturing line consists of a saturator (including wet looper) and/or a coater and their associated coating mixers, sealant applicators, adhesive applicators, and asphalt storage and process tanks.

To reduce repetition in the final NESHAP, we have separated asphalt storage tanks into two groups. Group 1 asphalt storage tanks: have a capacity of 177 cubic

meters (47,000 gallons) of asphalt or greater and either store asphalt at a maximum temperature of 260 °C (500 °F) or greater, or have a maximum true vapor pressure of 10.4 kiloPascals (kPa) (1.5 pounds per square inch absolute, psia) or greater. Group 2 asphalt storage tanks are those tanks with a capacity of 1.93 Mg of asphalt or greater that are not Group 1 asphalt storage tanks.

Asphalt storage tanks at asphalt processing and asphalt roofing manufacturing facilities that are collocated may be shared by the two operations. If the asphalt roofing manufacturing line is collocated with an asphalt processing facility, the storage tanks that receive asphalt directly from the on-site blowing stills are defined as part of the asphalt processing affected source.

A facility that manufactures asphalt roofing may have more than one manufacturing line. At these facilities, asphalt storage tanks and sealant and adhesive applicators may be shared by roofing manufacturing lines. A shared storage tank is considered part of the asphalt roofing manufacturing line to which the tank supplies the greatest amount of asphalt on an annual basis. Similarly, a sealant or adhesive

applicator that is shared by two or more asphalt roofing manufacturing lines is considered part of the line that provides the greatest throughput to the applicator on an annual basis. Recordkeeping provisions documenting these equipment allocations are found in §63.8694(d) of the final rule.

This definition of affected source is also used to determine if new source standards apply when subject equipment is "constructed" or "reconstructed," as defined in the NESHAP General Provisions (40 CFR 63.2). We defined the affected source as the asphalt processing facility or asphalt roofing manufacturing line, rather than on a narrow equipment-piece basis, because we believe that it is inappropriate for small changes (e.g., the addition of a sealant applicator to a manufacturing line) to trigger the new source emission limits for only part of the manufacturing line. For asphalt processing facilities, this is not a concern since the existing and new source standards are the same. However, the existing and new source standards are different for asphalt roofing manufacturing lines.

For asphalt roofing manufacturing lines, the new source emission limits would be triggered only when an

entire new line is added or when an existing line is reconstructed. This is appropriate because the manufacture of roofing products is a continuous process, with the equipment for the different process steps arranged in sequence. Consequently, an increase in production cannot be achieved simply by adding a single piece of process equipment (e.g., a coater). To increase production capacity, significant parts of the line would have to be modified or a new line would need to be constructed.

C. What pollutants are regulated by the final NESHAP?

The final rule establishes emission limits for two pollutants, total hydrocarbons (THC) and PM, each of which serves as a surrogate for HAP emitted by the process equipment.

Total Hydrocarbons

We are regulating total gaseous organic HAP emissions using THC as a surrogate. Total hydrocarbons are an appropriate surrogate for total HAP since organic HAP constitutes a significant portion of the THC, and because combustion controls are equally effective at reducing emissions of a wide range of organic compounds (including organic HAP emitted by asphalt processing and

roofing manufacturing facilities and THC). Thus, reduction of organic HAP and THC from these sources is proportionate.

Particulate Matter

Particulate matter emitted from blowing stills consists of condensed organic hydrocarbons. For organic HAP that is present in condensed PM form, we are using PM as a surrogate. Similar to the THC surrogate for gaseous HAP, PM is an appropriate surrogate because it includes the HAP that are emitted as condensed PM. Because the reductions achieved by PM control devices are not pollutant-specific (i.e., one type of PM is not preferentially reduced over another type of PM), controlling PM will result in a generally proportionate amount of condensed particulate organic HAP control.

D. What emission limits must I meet?

You must meet the emission limits that are summarized in Table 1 to the final rule. The emission limits are expressed in appropriate formats for the various process equipment being regulated. Depending on the piece of process equipment, you may have the option of complying with any of several formats. These formats include a PM emission limit (expressed in terms of

kilograms of PM per Mg product manufactured), a THC percent reduction standard, a THC outlet concentration, a THC destruction efficiency standard (only for combustion devices that do not use auxiliary fuel), or a combustion efficiency standard.

The THC destruction efficiency and combustion efficiency standards are provided as an alternative to the THC percent reduction standard in the final rule because there are some emission sources (e.g., blowing stills) for which testing of the control device inlet is impractical.

Saturators (including wet loopers) and coaters at existing roofing manufacturing lines must meet PM emission limits based on the type of substrate used in manufacturing. At existing, reconstructed, and new asphalt roofing manufacturing lines, saturators (including wet loopers) and coaters must meet an opacity limit, and the emission capture system for these equipment must meet a visible emissions standard. The final rule also provides the option for Group 2 asphalt storage tanks, saturators (including wet loopers), and coaters at existing and new asphalt roofing manufacturing lines and coating mixers, sealant applicators, and

adhesive applicators at existing asphalt roofing manufacturing lines to comply with either the THC or the combustion efficiency standards instead of the PM and opacity standards.

E. When must I comply?

Existing sources must comply with the final rule no later than [INSERT DATE 3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER]. The 3-year period is necessary to allow owners and operators sufficient time to design, purchase, and install emissions capture systems and air pollution control equipment. New or reconstructed sources must comply with the final rule at startup or [INSERT DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], whichever is later.

If your asphalt processing facility or asphalt roofing manufacturing line is located at a facility that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after [INSERT THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], then any portion of the existing facility that is a new affected source or a reconstructed affected source must comply with all requirements of the

final rule applicable to new sources upon startup after the facility becomes a major source or by [INSERT THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], whichever is later. All other parts of any facility to which the final rule applies must be in compliance with this subpart by 3 years after becoming a major source.

F. What are the testing and initial compliance requirements?

You must conduct a performance test to demonstrate initial compliance with the final rule emission limits unless you are using the results from an acceptable previously-conducted emission test to demonstrate compliance with the emission limitations in the final rule, or you are using a control device that the EPA has already determined achieves the required HAP destruction efficiency.

If you choose to use the results from a previously-conducted emissions test, you must demonstrate to the Administrator's (or delegated authority) satisfaction that no changes have been made to the process since the time of the emissions test, the operating conditions and test methods used during testing conform to the

requirements of the final rule, and the control device and process parameter values established during the previously-conducted emission test are used to demonstrate continuous compliance with the final rule.

An initial performance test is not required for boilers or process heaters with a design heat input capacity of 44 megawatts (MW) or greater or where the emissions are introduced into the flame zone of the boiler or process heater. Performance testing is also not required for flares that meet the design and operating requirements of 40 CFR 63.11(b). An initial performance test is not required for boilers and process heaters larger than 44 MW because they operate at high temperatures and residence times. When vent streams are introduced into the flame zone of these boilers and process heaters, over 98 percent reduction or an outlet concentration of 20 parts per million per volume (ppmv) is achieved. Therefore, a performance test is not necessary. We are not requiring performance testing of flares because percent reduction and outlet concentration cannot feasibly be measured at flares. The operating conditions in §63.11 assure that the flare will be operated properly and achieve the requisite degree of

destruction of organic HAP.

As specified in 40 CFR 63.7(e), performance tests must be conducted within the range of normal operating conditions. To ensure that compliance can be achieved over the entire range of operating conditions, the performance tests must be conducted under the operating conditions that reflect the highest rate of asphalt processing or roofing production reasonably expected to be achieved by the facility. For example, performance tests of roofing manufacturing line equipment must be conducted while operating under normal conditions and while manufacturing the roofing product that is expected to result in the greatest amount of HAP emissions.

For each performance test, you must conduct a minimum of three 1-hour test runs. Compliance is determined based on the average of the three test runs. To measure PM, you must use EPA test method 5A; for THC emissions, you must use EPA test method 25A.

For the THC destruction efficiency and combustion efficiency standards, you must measure emissions of THC, carbon monoxide (CO), and carbon dioxide (CO₂) to demonstrate compliance. For the THC outlet concentration you must measure emissions of THC to demonstrate

compliance. You must use EPA test method 10 to measure CO emissions and EPA test method 3A to measure CO₂ emissions. The EPA test methods are contained in appendix A of 40 CFR part 60. You must demonstrate compliance with the PM emission limit, THC percent reduction standard, THC outlet concentration standard, THC destruction efficiency standard, and the combustion efficiency standard using the instructions and equations in the performance test requirement section of the final rule.

The final rule also contains opacity and visible emission standards for saturators (including wet loopers) and coaters and their emissions capture systems at existing, new, and reconstructed asphalt roofing manufacturing lines and an opacity standard for certain asphalt storage tanks at existing, new, and reconstructed asphalt processing facilities and roofing manufacturing lines. Opacity and visible emission compliance determinations must be made using EPA test methods 9 and 22 in appendix A of 40 CFR part 60, respectively.

The final rule allows you to demonstrate continuous compliance with the emission standards by monitoring control device operating parameters or by using

continuous emission monitoring systems (CEMS) to directly measure emissions. Although the final rule does not require continuous monitoring of opacity, you can use continuous opacity monitoring systems (COMS) if you choose to do so since the opacity standard applies at all times.

If you choose to conduct parameter monitoring, you must install, calibrate, maintain, and operate a continuous parameter monitoring system (CPMS) to monitor the control device parameters. During the performance test, you must continuously monitor and record control device parameters and establish the monitoring parameter value(s) that constitute compliance with the emission limits if you plan to use parameter monitoring to demonstrate compliance following the initial performance test. If you use a combustion device to comply with the standards, you must record the average operating temperature. The temperature monitoring device must be installed at the exit of the combustion zone or in the ductwork immediately downstream of the combustion zone, before any substantial heat loss occurs. If you use a control device to comply with the PM standards, you must record the device inlet gas temperature and pressure drop

across the device. If you use electrostatic precipitators (ESP) to achieve compliance with the PM standard, you may record the voltage of the ESP as an alternative to the pressure drop across the ESP.

For combustion devices and PM control devices, the parameters must be monitored and values recorded in 15-minute blocks during each of three 1-hour test runs. If you use a control device other than a combustion device or PM control device to comply with the final rule, you must propose the appropriate monitoring parameters, monitoring frequencies, and averaging periods. All monitoring parameters for control devices not specified in the final rule must be approved by the Administrator as specified in 40 CFR 63.8(f).

If you choose to demonstrate continuous compliance by directly measuring emissions, you must install, calibrate, maintain, and operate a CEMS and record the emissions during the performance test according to the procedures specified in 40 CFR part 63, subpart A.

For all monitoring approaches (CPMS and CEMS (and COMS, if used)), you must also monitor and record the average hourly roofing line production rate or the asphalt processing rate, as applicable, during the

performance test. If you are complying with the PM emission limit, you must also determine the asphalt content of the product manufactured during the performance test.

G. What are the continuous compliance provisions?

After the performance test, you must demonstrate continuous compliance with the emission limits by monitoring either control device or process operating parameters or by monitoring emissions. The parameters or emissions must remain within the limits established during the initial performance test.

If you choose to use parametric monitoring to demonstrate continuous compliance with the standards, the final rule specifies the parameters that are to be monitored. For combustion devices (other than boilers, process heaters, and flares that meet specified design and operating requirements), you must monitor the operating temperature. For control devices used to meet the PM standards, you must monitor the inlet gas temperature and pressure drop across the device. If you use an ESP to achieve compliance with the PM standard, you may monitor the voltage of the ESP as an alternative to pressure drop.

For parametric monitoring, you must determine and record 15-minute and 3-hour block averages of the specified parameters. However, the final rule allows the option of determining continuous compliance based on any 15-minute period (i.e., you are not required to calculate 3-hour block averages). If you choose this alternative, a monitoring parameter deviation would occur if the monitoring parameter value(s) is outside the approved range during any 15-minute period.

If you use a control device other than a combustion device or PM control device to achieve compliance with the emission limits, the monitoring parameters must be approved by the Administrator and established during the initial performance test. To change the value of any monitored parameter, you must conduct a performance test and submit a request to the Administrator for approval using the procedures specified in 40 CFR 63.8(f).

H. What are the notification, recordkeeping and reporting requirements?

You must comply with the notification, recordkeeping, and reporting requirements in 40 CFR part 63, subpart A, as specified in Tables 6 and 7 to the final rule. The notification, recordkeeping, and

reporting requirements include, but are not limited to: initial notification of applicability of the rule, notification of the dates for conducting the performance test and notification of compliance status; reports of any startup, shutdown, and malfunction events that occur; and semiannual reports of excess emissions or deviations from monitoring parameter limits. When no deviations occur, you must submit semiannual reports indicating that no deviations have occurred during the period. For a combustion device, a deviation would be any time (excluding periods of startup, shutdown and malfunction which would be a separate report) that the operating temperature falls below the limit established during the initial performance test. For a control device used to meet the PM standards, a deviation would be any time (excluding periods of startup, shutdown and malfunction) that the temperature of the gas at the inlet to the control device or the pressure drop across the control device (or ESP voltage) are outside their respective limits established during the initial performance test.

You must maintain records of the following, as applicable: (1) combustion device operating temperature; (2) PM control device inlet gas temperature and pressure

drop (or voltage for ESP); (3) approved parameters for sources that comply with the emission limits using a control device other than a combustion device or PM control device; (4) CEMS; and (5) the date and time a deviation commenced if a monitoring parameter or emission deviation occurs, the date and time corrective actions were initiated and completed, a description of the cause of the deviation, and a description of the corrective actions taken. You must also prepare a startup, shutdown, and malfunction plan and maintain records of actions taken during these events, as required by 40 CFR 63.6(e)(3).

The final rule also includes a requirement to develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that specifies how the continuous parameter monitoring system will be installed, operated, and maintained as well as the data quality assurance procedures and ongoing recordkeeping and reporting procedures.

The NESHAP General Provisions (§63.10(b)) require that records be maintained for at least 5 years from the date of each record. You must retain the records onsite

for at least 2 years. You may retain records for the remaining 3 years at an offsite location. The records must be readily available and in a form suitable for efficient inspection and review. The files may be retained on paper, microfilm, microfiche, a computer, computer disks, or magnetic tape. Reports may also be made on paper or on a labeled computer disk using commonly available and compatible computer software.

III. What are the responses to the significant comments?

Significant public comments on the proposed rule along with our responses to these comments are summarized in this section of the preamble. For detailed responses to all the comments, see the Background Information Document (BID) ("National Emission Standards for Hazardous Air Pollutants, Asphalt Processing and Asphalt Roofing Manufacturing, Summary of Public Comments and Responses," February 2003, EPA-453/R-03-005) (Docket No. OAR-2002-0035).

A. Rule Applicability

Comment: Several commenters noted that it was not clear if the proposed rule applied to facilities that process asphalt intended for non-roofing products. The commenters suggested that confusion regarding

applicability was caused by addressing both the asphalt processing and asphalt roofing manufacturing source categories together under one NESHAP. Confusion may have also been caused by the proposed definition of asphalt flux, which read: "asphalt flux means the residual material from distillation of crude oil used to manufacture asphalt roofing products."

Response: On June 21, 2002, the EPA sent letters to the commenters to clarify two aspects of the proposed rule:

- the proposed rule was intended to cover all asphalt processing regardless of the asphalt's end use; and
- requirements for storage vessels at asphalt roofing manufacturing facilities, inadvertently left out of the proposed rule, are the same as those for storage vessels at asphalt processing facilities.

Subsequent comments on the notice letters disagreed with EPA's interpretation of the proposed rule's applicability and contended that the EPA should address this clarification in a supplemental proposal.

The EPA does not believe that a supplemental proposal is needed to clarify the applicability of the final rule. It has long been held that actual notice constitutes adequate notice and opportunity for comment for purposes of section 307 of the CAA. (See Small Lead

Refiner Phase Down Task Force v. EPA, 705 F. 2d 507, 548

(D.C. Cir. 1983).) The extensive comments received in response to the June 21, 2002 letters demonstrates that the commenters had adequate notice and availed themselves of it. There is no credible claim that further comments could have been submitted had there been more notice or that the time for response was inadequate. Under these circumstances, EPA believes that it afforded all letter recipients adequate notice and opportunity for comment and a supplemental notice to clarify the applicability of the rule is not necessary.

The final NESHAP includes both asphalt processing and asphalt roofing manufacturing because many facilities both process asphalt and manufacture roofing products (asphalt roofing and other roofing products).

With respect to the issue of whether asphalt processing should include operations that process asphalt for non-roofing uses, EPA believes that it should. The HAP emissions from asphalt processing (and the means of controlling such emissions) are identical, whether or not asphalt is produced for roofing or for other uses. Nor did EPA ever intend to distinguish among asphalt uses in setting out the rule's scope. The source category

definition ("Documentation for Developing the Initial Source Category List," EPA-450/3-91-030, July 1992) of "asphalt processing" reads as follows:

"The Asphalt Processing source category includes any facility engaged in the preparation of asphalt at asphalt processing plants, petroleum refineries, and asphalt roofing plants. Asphalt preparation, called 'blowing,' involves the oxidation of asphalt flux by bubbling air through the liquid asphalt flux at 260°C for 1 to 4.5 hours, depending upon the desired characteristics of the asphalt. The category includes, but is not limited to, the following process: asphalt heating, blowing still, and asphalt storage tanks" (emphasis added).

This definition is not limited to asphalt that is processed for roofing manufacturing, and in fact, is not limited in any respect by the ultimate use to which processed asphalt is put. Consistent with the source category definition, it was not EPA's intent to limit the applicability of the final rule to the processing of roofing asphalt or any other end use.

To clarify the final rule applicability, EPA has written the definition of asphalt processing in the final rule to read as follows:

"Asphalt processing facility means any facility engaged in the preparation of asphalt flux at stand-alone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities. Asphalt preparation, called "blowing," is the oxidation of asphalt flux, achieved by bubbling air through the heated

asphalt, to increase the softening point and reduce the penetration of the oxidized asphalt. An asphalt processing facility includes one or more asphalt flux blowing stills and their associated asphalt flux storage tanks, oxidized asphalt storage tanks and oxidized asphalt loading racks."

The EPA has also modified the definition of "asphalt flux" as proposed to remove any suggestion that the rule's scope is limited by the intended use of the processed asphalt.

B. Asphalt Storage Tank and Loading Rack Vapor Pressure Control Cutoff

Comment: Several commenters supported using a vapor pressure cutoff, such as those found in the petroleum refinery NESHAP (40 CFR part 63, subpart CC) and the new source performance standards for storage vessels (40 CFR part 60, subparts K, Ka, and Kb) for asphalt storage tanks and loading racks. The commenters contended that equipment with vapor pressures below those thresholds would emit only minimal amounts of HAP and therefore should not be subject to control requirements. The commenters also alleged that EPA was being inconsistent among different MACT standards in developing standards applicable to similar types of equipment. For example, one commenter asserted that EPA should not declare

emissions from low HAP, low vapor pressure stocks as de minimis sources under the petroleum refineries NESHAP and then propose to regulate those same emissions under the asphalt NESHAP. One commenter contended that it would be reasonable for EPA to use an approach similar to the petroleum refinery NESHAP because asphalt flux feedstocks and finished asphalt products are produced directly by refineries and because many refineries will be subject to the asphalt NESHAP.

Response: The proposed MACT for all asphalt storage tanks with a capacity of 1.93 Mg or greater at existing, new, and reconstructed affected sources was based on the fact that greater than 12 percent of the asphalt storage tanks were controlled with a combustion device operating at or above 1200 °F. Also, the available data showed that no sources were using a combustion device to control emissions from storage tanks with a capacity less than 1.93 Mg of asphalt. Therefore, the proposed MACT did not require control of tanks with capacities less than 1.93 Mg (66 FR 58620).

The EPA now believes that the prevalence of combustion devices on tanks storing asphalt at low vapor pressure is misleading. We believe that combustion

devices in this industry are used to control emissions from tanks storing high- and low-vapor asphalt that are generally part of an "integrated system," an integrated group of process equipment including higher-emitting equipment such as a blowing still, so that what really is being controlled by combustion are the emissions from the high-emitting equipment, with emissions from other system components being "along for the ride."

An integrated system is one in which process components (e.g., blowing stills, coaters, and tanks storing high- and low-vapor pressure asphalt) are utilized largely together and are generally located in close proximity. In an integrated system, emissions from process equipment that are subject to less stringent emission standards (e.g., tanks storing low-vapor pressure asphalt) generally are routed to the control device (e.g., combustion device) that is used to control emissions from the equipment (e.g., blowing stills, coaters) that are subject to more stringent emission standards. In other words, it is more cost effective to "over control" emissions from lower-emitting storage tanks that are nearby, using a combustion device that is selected and designed to control emissions from the

entire system (e.g., blowing stills, coaters, and asphalt storage tanks), than it is to install a separate control device to reduce emissions from the storage tanks to a lesser degree.

In the absence of an integrated system configuration, we do not believe that combustion controls represent the MACT floor (or otherwise represent MACT) for tanks that store low-vapor pressure asphalt since facilities that do not use a combustion device to reduce emissions from higher-emitting process equipment are unlikely to use a combustion device to reduce emissions from tanks that store low-vapor pressure asphalt (and we in fact know of no instance when a tanks storing low-vapor pressure asphalt in this industry are controlled by a combustion device when the tank is a stand-alone unit). Therefore, for tanks storing asphalt with a low vapor pressure, the MACT floor largely depends on whether or not the tank is part of an integrated system.

Based on the above discussion, it would seem logical to develop one set of standards for integrated systems (including tanks) and another for nonintegrated systems (where tanks would have different standards). However, we do not have sufficient data to characterize the

control level of integrated versus nonintegrated systems or even to devise workable definitions of these systems. The significance of the existence of integrated systems, therefore, relates to calculation of floor standards for tanks.

Based on the existence of integrated systems, we do not believe that we have to include all tanks storing high- and low-vapor pressure asphalt together in making a floor determination for storage tanks. We do believe that it is reasonable to assume that facilities would use combustion devices for tanks storing high-vapor pressure asphalt because of the greater potential for emissions from these tanks and the appropriateness of controlling volatile emissions using combustion devices. We, thus, included all such tanks as a single group in determining floor standards and determined that the best-performing 12 percent of tanks used to store high-vapor pressure asphalt use combustion to control the emissions. (We did not, however, include tanks used to store low-vapor pressure asphalt in this calculus and are not compelled to for the reasons explained above relating to integrated systems.) Therefore, for tanks storing asphalt with a high vapor pressure at existing and new sources, we

believe that the MACT floor is a combustion device regardless of whether or not it is located in an integrated system.

For tanks storing low-vapor pressure asphalt, a separate determination must be made to establish the MACT floor for existing and new sources. For these storage tanks, the MACT floor depends mainly on whether or not the tank is part of an integrated system. However, as noted above, we are unable to devise a workable definition of the integrated system. Among other problems, we have no information regarding tank vapor pressure or facility configurations to determine the relative proximity of low-vapor pressure asphalt storage tanks to combustion devices. Although we are unable to develop a separate standard for integrated systems, the MACT floor for any storage tank cannot be less stringent than the opacity limits for controlling PM specified in the asphalt NSPS, since over 12 percent of existing storage tanks in the industry are already subject to those standards. In fact, approximately 27 percent of the storage tanks in the database use particulate controls (such as fiber-bed filters, mist eliminators, condensers) to meet the asphalt NSPS. This control of PM

will necessarily control HAP emissions since a portion of the PM is condensed HAP. Therefore, the MACT floor for tanks storing asphalt with low vapor pressures at existing and new sources is the opacity limit specified in the asphalt NSPS.

We recognize that this floor for tanks storing low-vapor pressure asphalt actually applies to some tanks that are part of integrated systems. Nevertheless, we expect that tanks that are part of an integrated system are controlled by the same control device used to control the entire system, rather than being controlled separately. Therefore, using the opacity limit specified in the asphalt NSPS as a floor for tanks storing asphalt with low vapor pressures should not discourage facilities from using combustion devices to control emissions from storage tanks that are part of integrated systems. Nor is it likely to lead to removal of any existing controls on integrated systems since the combined system was already adopted by those facilities and removal would entail retrofit costs.

With regard to establishing the vapor pressure cutoff value that would be used to assign tanks into high- and low-vapor pressure groups (Groups 1 and 2,

respectively), EPA does not have survey data for the vapor pressure of stored asphalt that could be used to establish this value. In the absence of vapor pressure data, we based the vapor pressure cutoff value on the MACT floor for existing storage tanks at petroleum refineries. Asphalt tanks are similar because asphalt is a petroleum refinery product, and asphalt processing facilities are located at some petroleum refineries. Therefore, EPA believes that it is reasonable for the vapor pressure cutoff in the final rule to be consistent with the maximum true vapor pressure cutoff (10.4 kPa) for existing storage tanks in the petroleum refinery NESHA. Thus, under the final rule, tanks storing asphalt with a maximum true vapor pressure of 10.4 kPa or greater are considered "high-vapor pressure" tanks (i.e., Group 1 tanks) while tanks storing asphalt with a maximum true vapor pressure less than 10.4 kPa are considered "low-vapor pressure" tanks (i.e., Group 2 tanks).

The petroleum refinery NESHA also contains an annual average true vapor pressure cutoff (8.3 kPa) and an annual HAP liquid concentration cutoff (4 percent, by weight of total organic HAP) for determining storage tank applicability. Because the storage temperature of

asphalt at asphalt processing and asphalt roofing manufacturing facilities is expected to be maintained over a narrow range throughout the year, providing an annual average for storage temperature in the asphalt NESHAP is unnecessary. The concentration cutoff was included in the petroleum refinery NESHAP to address the fact that some liquids at petroleum refineries have very low HAP concentrations and high vapor pressures due to the volatility of non-HAP compounds in the material. However, because asphalt processing and asphalt roofing manufacturing facilities do not typically store products other than asphalt, the EPA believes that including an annual HAP liquid concentration cutoff in the asphalt NESHAP is unnecessary.

With regard to the proposed tank capacity cutoff of 1.93 Mg, EPA believes that the analysis used to establish the proposed capacity cutoff for combustion control was flawed since the cutoff value was based on the smallest tank controlled by a combustion device. Since we now consider the seeming prevalence of combustion devices on tanks storing low-vapor pressure asphalt to actually reflect controls on integrated systems (driven by the need to control the greatest emission source of the

integrated system), we do not believe that the proposed capacity cutoff value for combustion control is valid because it was premised on the assumption that stand-alone (i.e., non-integrated) low-vapor pressure asphalt storage tanks were controlled by means of combustion devices. Consequently, we are establishing the capacity cutoff value for combustion control to be consistent with the capacity cutoff for existing tanks at petroleum refineries (again consistent with comments urging that the petroleum and asphalt NESHAP be consistent insofar as they apply to similar types of emission sources).

Therefore, the floor for asphalt storage tanks with a capacity of 177 cubic meters or greater and storing asphalt with a maximum vapor pressure of 10.4 kPa or greater (i.e., Group 1 asphalt storage tanks) at existing and new sources is combustion control. The floor for asphalt storage tanks with a capacity of 177 cubic meters or greater storing asphalt with a maximum vapor pressure less than 10.4 kPa (i.e., Group 2 asphalt storage tanks) at existing and new sources is the opacity limit specified in the asphalt NSPS. As at proposal, however, we are not determining a floor level of control for tanks less than a capacity of 1.93 Mg. Based on the tank

capacity data from the Asphalt Roofing Manufacturers Association survey, less than 2 percent of the tanks have capacities less than 1.93 Mg, and only one of those tanks is vented to a PM control device.

The EPA is also applying much this same reasoning in determining a MACT floor for asphalt loading racks. The proposed MACT for asphalt loading racks at existing, new, and reconstructed affected sources was based on the fact that greater than 12 percent of the loading racks were controlled with a combustion device operating at or above 1200 °F. Although we do not have vapor pressure data for loading racks, we believe (as with storage tanks) that it is reasonable to assume that facilities are using combustion devices to control emissions from loading racks that are used to transfer high-vapor pressure asphalt because of the greater potential for emissions from this asphalt and the appropriateness of controlling volatile emissions using combustion devices. Consequently, the EPA believes that the MACT floor for loading racks transferring high-vapor pressure asphalt at existing and new sources is a combustion device regardless of whether or not it is part of an integrated system. In the absence of vapor pressure data, and to be

consistent with the approach used for high-vapor pressure (Group 1) asphalt storage tanks, we based the vapor pressure cutoff for loading asphalt racks on the maximum true vapor pressure cutoff (10.4 kPa) for existing storage tanks in the petroleum refinery NESHAP.

For loading racks used to transfer low-vapor pressure asphalt at existing and new sources, as with low-vapor pressure (Group 2) asphalt storage tanks, we are unable to develop a separate standard for integrated systems. However, unlike the asphalt NSPS for storage tanks, an existing regulation does not exist for asphalt loading racks that would establish a minimum level of the MACT floor. Therefore, a MACT floor for loading racks transferring asphalt with a maximum vapor pressure less than 10.4 kPa at existing and new sources could not be established.

In summary, the MACT floor for tanks with an asphalt storage capacity of 177 cubic meters or greater and storing asphalt with a maximum vapor pressure of 10.4 kPa or greater at existing and new sources is based on a combustion device operating at or above 1200 °F. For tanks with asphalt storage capacities of 177 cubic meters or greater or storing asphalt with a maximum vapor

pressure less than 10.4 kPa, the MACT floor for existing and new sources is represented by the opacity limit in the asphalt NSPS. The opacity limit of the asphalt NSPS also represents the MACT floor for asphalt storage tanks with capacities less than 177 cubic meters but greater than or equal to 1.84 cubic meters at existing and new sources. For loading racks used to transfer asphalt with a maximum vapor pressure of 10.4 kPa or greater at existing and new sources, the MACT floor is a combustion device operating at or above 1200 °F. The MACT floor for loading racks used to transfer asphalt with a maximum vapor pressure less than 10.4 kPa at existing and new sources is no additional control.

Also, as explained in detail in the preamble to the proposal (66 FR 58620-21), we continue to believe that controls beyond the MACT floor for high-vapor pressure asphalt storage tanks and loading racks (where the floors have not changed between the proposed and final rule) are not technically or economically feasible (i.e., there are no known controls that would reduce HAP emissions more than combustion control), so that MACT for the high-vapor pressure asphalt storage tanks and loading racks is represented by their respective MACT floors.

For the low-vapor pressure asphalt storage tanks (for which we have made a different floor determination), the only control option beyond the MACT floor is control with a combustion device. However, given the relatively low HAP emissions from this equipment, the incremental cost-effectiveness (greater than \$3,000,000 per megagram of HAP reduced) of increasing the level of HAP reduction achieved by a PM control device (93.3 percent) (the device we anticipate would be used to achieve the opacity standard which is the MACT floor) to that achieved by a combustion device (95 percent) is not a justifiable option. (Additional energy use likewise would be required to achieve this modest incremental HAP reduction as well.) Therefore, MACT for low-vapor pressure asphalt storage tanks is represented by the MACT floor.

For low-vapor pressure asphalt loading racks, the control options beyond the MACT floor are a PM control device and a combustion device. However, as with low-vapor pressure asphalt storage tanks, the high costs per megagram of HAP reduction (greater than \$500,000 per megagram of HAP reduced) achieved by controlling low-vapor pressure asphalt loading rack emissions with either a PM control device or combustion device make the beyond

the MACT floor options economically infeasible. Therefore, MACT for low-vapor pressure asphalt loading racks is represented by the MACT floor.

Because we are specifying vapor pressure as a cutoff for different groups of tanks, it is necessary to identify how such a determination would be made if a facility were required to do so. Following proposal, the EPA met with industry representatives to identify an appropriate test method for determining the vapor pressure of stored asphalt, if EPA were to promulgate such a cutoff. According to the industry and EPA representatives, a standardized or consensus test method for measuring the vapor pressure of stored asphalt has not been established. (See the summary of the September 17, 2002 meeting with petroleum refinery representatives in Docket No. OAR-2002-0035.) Currently, the industry uses nomographs or other relationships depicting the vapor pressure of petroleum liquids as a function of storage temperature vapor pressure and asphalt composition (e.g., flux versus oxidized) to determine the vapor pressure of stored asphalt.

Since there is no standardized test method for measuring the vapor pressure of stored asphalt, the EPA

believes that the final rule should specify a temperature that equates to a vapor pressure of 10 kPa, instead of requiring facilities to physically measure asphalt vapor pressure. According to industry representatives, asphalt flux reaches 10.4 kPa at approximately 500 to 550 °F (oxidized asphalt would require higher temperatures to reach 10.4 kPa). The temperature estimate cited by the industry representatives was confirmed on a theoretical level using a regression equation for asphalt vapor pressure as a function of temperature, developed by the Owens Corning Company using a modified version of the American Society of Testing and Materials (ASTM) method D2879 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope). According to the regression equation, asphalt flux reaches a vapor pressure of 10.4 kPa at approximately 450 °F.

Since the regression equation, which under-predicts the temperature at which asphalt flux reaches a given vapor pressure (according to industry and EPA representatives), tends to corroborate the storage temperature cited by the industry representatives, the EPA believes that a storage temperature of 500 °F

appropriately represents a vapor pressure of 10.4 kPa. Consequently, the final rule specifies that tanks storing (and loading racks transferring) asphalt at a maximum vapor pressure of 10.4 kPa or greater, or at a maximum temperature of 500 °F or greater, must be controlled with a combustion device. Also, the final rule allows the use of standard industry nomographs and other relationships to determine the vapor pressure of asphalt. The docket for this NESHAP (Docket No. OAR-2002-0035) contains a memorandum from the National Petrochemical and Refiners Association (NPRA) that presents several manual methods that are currently used in the petroleum industry for estimating the vapor pressure of asphalt.

C. Level of the Standards

Comment: One commenter questioned the derivation of the THC destruction and combustion efficiency standards (95 and 99.6 percent, respectively). The commenter contended that the statistical analysis used to derive the standards from test data was incorrect.

Response: The EPA agrees with the commenter that the available data set is too small for a rigorous statistical analysis. Therefore, at proposal, we chose to account for the variability in the data by subtracting

one standard deviation from the mean, rather than performing a more formal statistical analysis to derive the proposed emission limit. Despite the small size of the data set, since proposal, the EPA has calculated the 95 percent confidence interval about the mean of the test data for THC destruction efficiency. The lower limit of the 95-confidence interval is 94.85 percent THC destruction efficiency. (See section 2.3.10.2 of the BID for a more detailed discussion of this analysis.) In other words, there is only a 5 percent chance that the true population mean of THC destruction efficiency will be below 94.85 percent. In addition, all four of the facilities with THC destruction efficiency data would meet the standards. This calculation supports that a THC destruction efficiency of 95 percent is achievable. The 95 percent destruction efficiency has thus been included in the final rule.

Since proposal, the EPA has calculated the 95 percent confidence interval about the mean of the test data used to establish the proposed combustion efficiency. The lower limit of the 95 percent confidence interval is 99.49 percent combustion efficiency. Since this value is lower than the proposed combustion

efficiency limit of 99.6 percent, the EPA has decided to establish the combustion efficiency limit in the final rule at 99.5 percent. (Note that this change does not affect EPA's determination, made originally at proposal, that beyond-the-floor controls remain inappropriate here, largely because EPA knows of no means of control more efficient than combustion control.)

Comments: Comments were also received on the proposed rule regarding the use of electric regenerative thermal oxidizers (RTO). One commenter explained that EPA's proposed method for calculating combustion efficiency penalizes control technologies that do not burn auxiliary fuel and, consequently, have a relatively low CO₂ concentration at their outlets. The commenters stated that the proposed method for calculating combustion efficiency understates the combustion efficiency achieved by an RTO since the only relevant source of CO₂ in RTO exhaust comes from the destruction of hydrocarbons. The commenters submitted test data and proposed a separate equation for calculating the destruction efficiency for RTO.

Response: The EPA reviewed the test data submitted by the commenters (see section of the 2.3.10.6 of the BID)

and agrees that, because RTO do not use auxiliary fuel, the outlet CO₂ concentrations are much less than those of conventional thermal oxidizers without compromising THC destruction efficiency. Consequently, the final rule contains an option that allows combustion devices that do not use auxiliary fuel to use an outlet-only THC destruction efficiency equation. To determine the level of the standard for RTO, the same approach as was taken for the derivation of the THC destruction efficiency and combustion efficiency standards was used (i.e., one standard deviation was subtracted from the average THC destruction efficiencies calculated from the test data submitted by the commenters). The resulting calculations (see section 2.3.10.6 of the BID) yield a THC destruction efficiency standard for RTO of 95.8 percent.

D. Compliance Options

Comment: One commenter noted that the control devices used at refineries to control blowing stills are flares, boilers, and process heaters and that refineries do not typically have thermal oxidizers. The commenter urged the EPA to allow the use of combustion devices other than thermal oxidizers to control blowing still emissions.

Response: The proposed rule did not prohibit the use of

process heaters, boilers, and flares because we consider these units to be types of thermal oxidizers. However, since the term "thermal oxidizer" was not defined in the proposed rule, the proposed rule could be interpreted differently. In the final rule, we use the term "combustion device" instead of "thermal oxidizer" and have defined combustion device to include process heaters, boilers, flares, and incinerators; all devices which achieve the same high degree of HAP destruction provided they operate using efficient combustion. Consistent with other rules, a performance test and continuous parameter monitoring are not required for boilers or process heaters if the vent streams to be controlled are introduced into the flame zone, or if the unit has a design input heat capacity of 44 MW or greater since the residence time and operating temperature of these devices is great enough to ensure reduction of HAP emissions. Flares are required to meet the design and operating requirements of 40 CFR 63.11 in lieu of conducting performance tests, as explained earlier in this preamble.

E. Performance Tests

Comment: One commenter expressed concern with the

requirement to conduct performance testing before the compliance date. The commenter stated that the NESHAP General Provisions and nearly all previously-issued MACT standards allow the test to be conducted within 180 days of the compliance date (existing sources) or at startup (new sources). The commenter pointed out that the testing date for existing sources is 8 months earlier than what is provided in the General Provisions and listed several problems that it would create.

Response: The EPA agrees that it is not necessary to require performance tests to be completed 60 days prior to the rule compliance date since this would effectively require that facilities be in compliance before the compliance date specified in the final rule.

Consequently, the final rule (§63.8686(a)) has been written to be consistent with the NESHAP General Provisions (performance tests must be conducted within 180 days after the compliance date).

F. Monitoring Requirements

Comment: Comments were received on a variety of monitoring requirements. The changes made to the proposed monitoring requirements are discussed in the following paragraphs.

Response: Many facilities in the asphalt processing and asphalt roofing manufacturing industry use analog chart recorders to display and record monitored parameters. However, when these devices are used, the value of the monitored parameters is generally not recorded electronically. Parameter values therefore cannot be automatically averaged and compared to the established range to determine if there has been an parameter deviation. Such a determination would have to be made through manual calculations. One commenter suggested that chart recorders could more easily be used for monitoring if manual calculations of 3-hour averages were not required and deviations were based on 15-minute exceedances of limits. Because the commenter's suggestion is more stringent than the requirements in the proposed rule, the EPA has decided that this is an acceptable alternative for determining continuous compliance. Therefore, the final rule was written to allow facilities the option of demonstrating continuous compliance using either a 15-minute or 3-hour averaging period.

For example, if a facility uses an analog chart recorder that provides a continuous record of the

combustion device operating temperature on a strip chart, the facility would be allowed to determine compliance with the NESHAP by comparing the minimum temperature reading for each 15-minute period to the minimum 15-minute value established during the initial performance test (i.e., the facility would not be required to manually average the readings on the strip chart over a 3-hour period to determine compliance with the standards).

Comment: One commenter asserted that facilities should be allowed to use CEMS and COMS to demonstrate continuous compliance with the standards.

Response: The proposed rule did not preclude facilities from using CEMS and COMS, and it was not EPA's intent to discourage facilities from using CEMS and COMS where feasible and beneficial to them. However, continuous monitoring is not required for the opacity standard, even though the opacity standard applies at all times (i.e., EPA test method 9 could be used at any time by the regulating agency to determine compliance with the opacity standard). To allow you to use continuous monitors without first obtaining the approval from the Administrator to use an alternative monitoring procedure,

the list of acceptable monitoring systems in the final rule has been written to include CEMS (and COMS) and their applicable performance specifications from 40 CFR part 60 Appendix B.

Comment: One commenter suggested that the EPA modify the proposed rule so that a facility using an ESP as a PM control device could select which parameters are appropriate for demonstrating compliance and have those parameters approved by the EPA in the same manner as "other" control devices.

Response: The EPA agrees with the commenter that ESP operate differently from filter-type PM control devices, and that parameters other than pressure drop could be used to show proper ESP operation. For these reasons, an alternative has been provided in the final rule to allow facilities using an ESP to monitor the voltage going to the ESP instead of the pressure drop across the device. The voltage going to the ESP is a direct measure of the strength of the corona field responsible for ionizing PM as it passes through the ESP. The value or range of ESP voltage must be determined during the performance test.

G. Overlap with Other Rules

Comment: One commenter stated that the rule should be

clarified so that asphalt flux and oxidized asphalt storage tanks already regulated under another MACT rule (for example, the petroleum refinery NESHAP) are not further regulated under the asphalt NESHAP.

Response: The EPA recognizes that asphalt storage vessels subject to the asphalt NESHAP could also be subject to other regulations, such as the petroleum refinery NESHAP (40 CFR part 63, subpart CC) and the storage vessel NSPS (40 CFR part 60, subpart K, Ka, or Kb). Consequently, EPA is providing in the final rule that the NESHAP does not apply to any equipment that is subject to the petroleum refinery NESHAP or to subpart K, Ka, or Kb of part 60 since the requirements specified in those rules for the types of storage tanks used in this industry (fixed roof tanks) are as stringent as the standards in the asphalt processing and asphalt roofing manufacturing NESHAP.

The EPA also recognizes that storage tanks (and blowing stills, saturators, wet loopers, and coaters) at asphalt processing and asphalt roofing manufacturing facilities could be subject to both the asphalt NESHAP and the asphalt NSPS. In cases where the rule requirements overlap, the asphalt rule specifies that

facilities are required to comply only with the asphalt NESHAP. However, any storage tank with a capacity less than 1.93 mg that is subject to the asphalt NSPS but not regulated under the asphalt NESHAP must comply with the asphalt NSPS.

IV. Summary of Environmental, Energy and Economic Impacts

Although MACT floors must be based exclusively on the emission limitation achieved by the requisite percentage of best-performing similar sources (or, for new sources, the best-performing source), the EPA has compiled information on air quality impacts, costs, non-air quality impacts, and energy impacts in compliance with Executive Orders. We estimate the final rule will affect a total of 19 existing facilities (ten asphalt processing and asphalt roofing facilities and nine petroleum refineries). We estimated the number of major sources by estimating potential emissions using emission factors and available production data. We identified major facilities only for the purposes of estimating potential emissions, emission reductions, control costs, and monitoring, recordkeeping, and reporting costs. It should be noted that facilities may not necessarily be

major sources for the purposes of determining applicability of the final rule because they were identified as major by our estimates. Likewise, facilities would not be relieved from complying with the final rule because they were not identified as major sources in our estimates.

A. What are the air quality impacts?

Baseline HAP emissions from the asphalt processing and asphalt roofing manufacturing facilities that are projected to be subject to the final rule are estimated to be 295 Mg/yr (325 tpy). Baseline THC emissions are estimated to be 550 Mg/yr (605 tpy). The baseline emission estimates were developed using equipment, control device, and production rate data reported in a 1995 industry survey. The final rule is projected to reduce HAP emissions by 86 Mg/yr (95 tpy) and THC emissions by 465 Mg/yr (512 tpy). The final rule will also reduce PM emissions from asphalt processing and asphalt roofing manufacturing facilities. However, we do not have sufficient data to estimate baseline emissions or emission reductions for PM. The baseline emissions and emission reductions do not include contributions from area sources because they are not subject to the final

rule.

The final rule will also likely cause an increase in emissions of nitrogen oxides (NO_x), CO, sulfur dioxide (SO_2), PM, and volatile organic compounds (VOC) due to the increased use of thermal oxidizers as control devices. The estimated increases of NO_x , CO, and SO_2 are approximately, 476, 799, and 6 Mg/yr (524, 880, and 6 tpy), respectively. These estimates are based on the amount of exhaust and auxiliary fuel that will be burned at the asphalt processing and asphalt roofing manufacturing facilities that are estimated to be major sources.

B. What are the cost impacts?

The total capital cost for the industry to achieve compliance with the final rule for existing facilities is estimated to be \$2.71 million. The capital costs arise from the purchase of emission capture systems and control devices. The total annualized cost is estimated to be \$1.41 million. The total annualized costs for the industry include the annualized capital cost of emission capture systems and control devices and operation, maintenance, supervisory labor, maintenance materials, utilities, administrative charges, taxes, and insurance.

It is estimated that the industry will spend an additional industrywide average of \$320,000 per year for monitoring, recordkeeping, and reporting to comply with the final rule. This results in a total annualized cost of \$1.73 million.

C. What are the economic impacts?

The Agency conducted an economic impact analysis to determine the market- and industry-level impacts associated with the final rule. The compliance costs of the final rule are expected to increase the prices of asphalt processing and roofing products by 0.02 percent or less across the directly affected product markets, and domestic production and consumption of the affected products are expected to decrease by less than 0.01 percent also.

In terms of industry impacts, the asphalt processors and asphalt roofing manufacturers are projected to experience a decrease in operating profits of about 0.08 percent, which reflects the compliance costs associated with the production of asphalt processing and roofing products and the resulting reductions in revenues due to the increase in the prices of the directly affected product markets and reduced quantities purchased.

Through the market impacts described above, the final rule created both gainers and losers within the asphalt processing and asphalt roofing manufacturing industry. The majority of facilities, almost 92 percent, are expected to experience profit increases with the final rule; however, there are some facilities projected to lose profits (about 8 percent of affected facilities). Furthermore, the economic impact analysis indicates that of the 123 existing asphalt roofing and processing facilities, none are at risk of closure because of the final rule. Therefore, none of the companies that own asphalt processing and roofing manufacturing facilities are projected to close due to the final rule.

Based on the market analysis, the annual social costs of the final rule are projected to be about \$1.73 million. The estimated social costs differ slightly from the projected engineering costs of the final rule. These two costs differ because social costs account for producer and consumer behavior. These social costs are distributed across the many consumers and producers of asphalt processing and roofing products. For the final rule, the producers of asphalt roofing and processing products, in aggregate, are expected to incur

about \$1.32 million annually in costs, while the consumers of asphalt roofing and processing products are expected to incur approximately \$410 thousand annually across the product markets.

The economic analysis also addressed potential changes in new asphalt processing and roofing facility construction for the year following promulgation of the final rule. This was done by estimating the total annualized costs for new facilities and projecting changes in equilibrium output due to the final rule. The economic impact analysis estimated a very small reduction in the growth of the asphalt industry represented by a small reduction in equilibrium output of asphalt products in the year following promulgation. However, the reduction in equilibrium output was only a small fraction of estimated new plant capacity. Thus, the control costs are not expected to influence the decision to enter the market for asphalt products. For more information, consult the Economic Impact Analysis report supporting the final rule in the docket.

D. What are the non-air health, environmental and energy impacts?

Spent filter media from certain types of PM control

devices (e.g., high-efficiency air filters (HEAF)) are periodically replaced and disposed of as solid waste. Although many of the emission sources subject to the final rule are already controlled by PM devices, an increase in the generation of spent filter media is expected as a result of the final rule. However, we do not have sufficient data to quantify this anticipated increase in solid waste generation.

No water impacts are anticipated due to the final rule. None of the control devices expected to be used to comply with the final rule require the use of water nor do they generate wastewater streams.

Increased energy usage is expected due to the final rule. Electricity is required to power fans for emission capture systems, and new thermal oxidizers will require supplemental fuel (e.g., natural gas) to efficiently combust the HAP vent streams. The estimated annual increase in electricity consumption is 5.58 million kilowatt hours. The approximate increase in natural gas consumption is 186 million standard cubic feet per year. These estimates are for the 19 facilities considered to be major sources.

V. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is "significant," and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that the final rule is not a "significant regulatory action" because it is not expected to have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.

B. Paperwork Reduction Act

The information collection requirements of the final rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by the EPA (ICR No. 2029.01) and a copy may be obtained from Susan Auby by mail at U.S. EPA, Office of Environmental Information, Collection Strategies Division, (2822T), 1200 Pennsylvania Ave., NW, Washington, DC 20460-0001, by e-mail at auby.susan@epa.gov or by calling (202) 566-1672. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>.

The information will be used by the EPA to ensure

that the requirements of the asphalt processing and asphalt roofing manufacturing NESHAP are implemented properly and are complied with on a continuous basis. Records and reports are necessary to identify asphalt processing and asphalt roofing manufacturing facilities that might not be in compliance with the final rule. Based on reported information, the implementing agency will decide which asphalt processing and asphalt roofing manufacturing facilities should be inspected and what records or processes should be inspected. Records that owners and operators of asphalt processing and asphalt roofing manufacturing facilities maintain indicate whether personnel are operating and maintaining control equipment properly.

These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to the EPA for which a claim of confidentiality is made will be safeguarded according to the EPA policies in 40 CFR part 2, subpart B, Confidentiality of Business Information.

We estimate the final rule will affect a total of 19 existing facilities (ten asphalt processing and asphalt roofing facilities and nine petroleum refineries). We

estimated the number of major sources by estimating emissions using emission factors and available production data and extrapolating potential emission from actual emissions. We identified major facilities for the purposes of estimating emissions, emission reductions, control costs, and monitoring, recordkeeping, and reporting costs only. Facilities would not necessarily be major sources for the purposes of determining applicability of the asphalt NESHAP because they were identified as major by our estimates. Likewise, facilities are not relieved from complying with the asphalt NESHAP because they were not identified as major sources in our estimates. We expect that existing facilities will be in compliance 3 years after promulgation of the final rule, but will perform related activities (e.g., reading and understanding the rule, conducting performance tests) before they are in compliance. We project that one new asphalt processing and asphalt roofing facility will become subject to the final rule during each of the first 3 years.

The estimated average annual burden for industry for the first 3 years after implementation of the rule is approximately 1,962 person-hours annually. There will be

no capital costs for monitoring or recordkeeping during the first 3 years. The total average annual reporting and recordkeeping burden (including industry and the EPA) for this collection is estimated at approximately 2,780 labor hours per year at an average annual cost of approximately \$356,000.

Burden means total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

C. Regulatory Flexibility Act (RFA)

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small business, small organizations, and small government jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, a small entity is defined as: (1) a small business according to Small Business Administration (SBA) size standards by NAICS code (in this case, less than 750 employees for affected businesses classified in NAICS code 324122, Asphalt Shingles and Coating Materials Manufacturing and less than 1,500 employees for businesses in NAICS code 324110, Petroleum Refineries); (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small

organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

In accordance with the RFA, the EPA conducted an assessment of the standards on small businesses within the asphalt roofing and processing industry. Based on SBA NAICS-based size definitions and reported employment data, the EPA identified 26 of the 40 companies that own potentially affected asphalt roofing and processing facilities and petroleum refineries as small businesses. Although small businesses represent 65 percent of the companies within the source category, they are expected to incur approximately 5 percent of the total industry compliance costs of about \$1.73 million annually. There are no companies with compliance costs greater than 0.04 percent of their sales. No firms are expected to close rather than incur the costs of compliance with the rule.

After considering the economic impacts of today's rule on small entities, the EPA certifies that the final rule will not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995

(UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, or tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for final rules with "Federal mandates" that may result in expenditures to State, local, or tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small

governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of the EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that the final rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, or tribal governments, in the aggregate, or the private sector in any 1 year. In the Economic Impact Assessment (EIA) for the final rule, the EPA estimates that the total nationwide capital cost for the standards is \$2.71 million. The total nationwide annual cost for the standards is \$1.73 million. In addition, the EPA has determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon

them. Therefore, the final rule is not subject to the requirements of sections 202 or 205 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires the EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. None of the affected facilities under the final rule are owned or operated by State or local

governments. Thus Executive Order 13132 does not apply to the final rule.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires the EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." "Policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

The final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175.

No affected facilities are owned or operated by Indian tribal governments. Thus, Executive Order 13175 does not apply to the final rule.

G. Executive Order 13045 - Protection of Children from Environmental Health and Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. The final rule is not subject

to Executive Order 13045 because it is based on technology performance and not on health and safety risks.

H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001), provides that agencies shall prepare and submit to the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, a Statement of Energy Effects for certain actions identified as "significant energy actions." Section 4(b) of Executive Order 13211 defines "significant energy actions" as "any action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) that is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated

by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action." The final rule is not a "significant regulatory action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

We have estimated that the rule will result in an additional 5.58 million kilowatt hours of electricity usage and 186 million standard cubic feet of natural gas consumption. This represents an insignificant fraction of the over 3 trillion kilowatt hours and 21,000 trillion cubic feet of natural gas consumed in the United States (Energy Information Administration, Department of Energy, www.eia.gov).

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law No. 104-113, section 12(d), (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are

developed or adopted by one or more voluntary consensus bodies. The NTTAA directs the EPA to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

The final rulemaking involves technical standards including EPA test methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5A, 9, 10, 22, and 25A. Consistent with the NTTAA, the EPA conducted searches to identify voluntary consensus standards in addition to these EPA test methods. No applicable voluntary consensus standards were identified for EPA test methods 1A, 2A, 2D, 2F, 2G, 5A, 9, and 22.

The search for emissions measurement procedures identified 16 voluntary consensus standards potentially applicable to the final rule. Three of the voluntary consensus standards were not available at the time this review was conducted. For the remaining 13 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in the final rule, we determined that they were impractical alternatives to EPA test methods for the purposes of the final rule. Therefore, the EPA does not intend to adopt

these standards. The search and review methods can be found in docket A-95-32 (see ADDRESSES section of this preamble).

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing the final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). The final rule will be effective on [INSERT DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and

recordkeeping requirements.

Dated:

Christie Todd Whitman,
Administrator

For the reasons cited in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

2. Part 63 is amended by adding a new subpart LLLLL to read as follows:

Subpart LLLLL--National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

Sec.

What This Subpart Covers

- 63.8680 What is the purpose of this subpart?
- 63.8681 Am I subject to this subpart?
- 63.8682 What parts of my plant does this subpart cover?
- 63.8683 When must I comply with this subpart?

Emission Limitations

- 63.8684 What emission limitations must I meet?

General Compliance Requirements

- 63.8685 What are my general requirements for complying with this subpart?

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- 63.8687 What performance tests, design evaluations, and other procedures must I use?
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Continuous Compliance Requirements

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Notifications, Reports, and Records

63.8692 What notifications must I submit and when?

63.8693 What reports must I submit and when?

63.8694 What records must I keep?

63.8695 In what form and how long must I keep my records?

Other Requirements and Information

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Tables to Subpart LLLLL of Part 63

Table 1 to Subpart LLLLL of Part 63 - Emission Limitations

Table 2 to Subpart LLLLL of Part 63 - Operating Limits

Table 3 to Subpart LLLLL of Part 63 - Requirements for Performance Tests

Table 4 to Subpart LLLLL of Part 63 - Initial Compliance With Emission Limitations

Table 5 to Subpart LLLLL of Part 63 - Continuous Compliance with Operating Limits

Table 6 to Subpart LLLLL of Part 63 - Requirements for Reports

Table 7 to Subpart LLLLL of Part 63 - Applicability of General Provisions to Subpart LLLLL

What This Subpart Covers

§63.8680 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for existing and new asphalt processing and asphalt roofing manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§63.8681 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an asphalt processing facility or an asphalt roofing manufacturing facility, as defined in §63.8698, that is a major source of hazardous air pollutants (HAP) emissions, or is located at, or is part of a major source of HAP emissions.

(b) After the applicable compliance date specified in §63.8683, blowing stills, asphalt storage tanks, saturators, wet loopers, and coaters subject to the provisions of this subpart that are also subject to 40 CFR part 60, subpart UU, are required to comply only with provisions of this subpart.

(c) This subpart does not apply to any equipment that is subject to subpart CC of this part or to subpart K, Ka, or Kb of 40 CFR part 60.

(d) This subpart does not apply to asphalt processing and asphalt roofing manufacturing equipment used for research and development, as defined in §63.8698.

(e) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has

the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

§63.8682 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at asphalt processing and asphalt roofing manufacturing facilities.

(b) The affected source is:

(1) Each asphalt processing facility as defined in §63.8698; or

(2) Each asphalt roofing manufacturing line as defined in §63.8698.

(i) If the asphalt roofing manufacturing line is collocated with an asphalt processing facility, the storage tanks that store asphalt flux intended for oxidation in the blowing stills and those tanks that receive asphalt directly from the on-site blowing stills are part of the asphalt processing facility. The remaining asphalt storage tanks are considered to be part of the asphalt roofing facility.

(ii) If an asphalt storage tank is shared by two or more lines at an asphalt roofing manufacturing facility,

the shared storage tank is considered part of the line to which the tank supplies the greatest amount of asphalt, on an annual basis.

(iii) If a sealant or adhesive applicator is shared by two or more asphalt roofing manufacturing lines, the shared applicator is considered part of the line that provides the greatest throughput to the applicator, on an annual basis.

(c) An affected source is a new affected source if you commenced construction of the affected source after November 21, 2001, and you met the applicability criteria at the time you commenced construction.

(d) An affected source is reconstructed if you meet the criteria in the reconstruction definition in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

§63.8683 When must I comply with this subpart?

(a) If you have a new or reconstructed affected source and start up:

(1) On or before [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], then you must comply with the requirements for new and reconstructed sources in this subpart no later than [INSERT THE DATE OF

PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(2) After [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], then you must comply with the requirements for new and reconstructed sources in this subpart upon startup.

(b) If you have an existing affected source, you must comply with the requirements for existing sources no later than [INSERT THE DATE 3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a (or part of a) major source of HAP, then the following requirements apply:

(1) Any portion of the existing facility that becomes a new or reconstructed affected source must be in compliance with this subpart upon startup or by [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], whichever is later.

(2) All other parts of the source to which this subpart applies must be in compliance with this subpart by 3 years after the date the source becomes a major source.

(d) You must meet the notification requirements in

§63.8692 according to the schedules in §§63.8692 and 63.9. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

Emission Limitations

§63.8684 What emission limitations must I meet?

(a) You must meet each emission limitation in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

General Compliance Requirements

§63.8685 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according

to the provisions in §63.6(e)(3).

(d) You must develop and implement a written site-specific monitoring plan according to the provisions in §63.8688(g) and (h).

Testing and Initial Compliance Requirements

§63.8686 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For existing affected sources, you must conduct performance tests no later than 180 days after the compliance date that is specified for your source in §63.8683 and according to the provisions in §63.7(a)(2).

(b) As an alternative to the requirement specified in paragraph (a) of this section, you may use the results of a previously-conducted emission test to demonstrate compliance with the emission limitations in this subpart if you demonstrate to the Administrator's satisfaction that:

(1) No changes have been made to the process since the time of the emission test; and

(2) The operating conditions and test methods used during testing conform to the requirements of this subpart; and

(3) The control device and process parameter values

established during the previously-conducted emission test are used to demonstrate continuous compliance with this subpart.

(c) For new sources, you must demonstrate initial compliance no later than 180 calendar days after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or within 180 calendar days after startup of the source, whichever is later.

§63.8687 What performance tests, design evaluations, and other procedures must I use?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you.

(b) Each performance test must be conducted under normal operating conditions and under the conditions specified in Table 3 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) Except for opacity and visible emission observations, you must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e) You must use the following equations to determine compliance with the emission limitations.

(1) To determine compliance with the particulate matter mass emission rate, you must use Equations 1 and 2 of this section as follows:

$$E = M_{PM}/P \quad (\text{Eq. 1})$$

Where:

E = Particulate matter emission rate, kilograms (pounds) of particulate matter per megagram (ton) of roofing product manufactured.
 M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour, determined using Equation 2.
P = The asphalt roofing product manufacturing rate during the emissions sampling period, including any material trimmed from the final product, megagram (tons) per hour.

$$M_{PM} = C * Q * K \quad (\text{Eq. 2})$$

Where:

M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour.
C = Concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart.
Q = Vent gas stream flow rate (dry standard cubic meters per minute) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.
K = Unit conversion constant (0.06 minute-kilogram/hour-gram).

(2) To determine compliance with the total

hydrocarbon percent reduction standard, you must use Equations 3 and 4 of this section as follows:

$$RE = [(M_{THCi} - M_{THCo}) / (M_{THCi})] * (100) \quad (\text{Eq. 3})$$

Where:

RE = Emission reduction efficiency, percent.
 M_{THCi} = Mass flow rate of total hydrocarbons entering the control device, kilograms (pounds) per hour, determined using Equation 4.
 M_{THCo} = Mass flow rate of total hydrocarbons exiting the control device, kilograms (pounds) per hour, determined using Equation 4.

$$M_{THC} = C * Q * K \quad (\text{Eq. 4})$$

Where:

M_{THC} = Total hydrocarbon emission rate, kilograms (pounds) per hour.
 C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 to this subpart.
 Q = Vent gas stream flow rate (dscmm) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.
 K = Unit conversion constant (3.00E-05) (ppmv)⁻¹ (gram-mole/standard cubic meter) (kilogram/gram) (minutes/hour)), where standard temperature for gram-mole/standard cubic meter is 20 °C.

(3) To determine compliance with the combustion efficiency standard, you must use Equation 5 of this section as follows:

$$CE = [1 - (CO/CO_2) - (THC/CO_2)] \quad (\text{Eq. 5})$$

Where:

CE = Combustion efficiency, percent.
 CO = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.
 CO₂ = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.
 THC = Total hydrocarbon concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

(4) To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, you must use Equation 6 of this section as follows:

$$\text{THC DE} = [(\text{CO} + \text{CO}_2)/(\text{CO} + \text{CO}_2 + \text{THC})] \quad (\text{Eq. 6})$$

Where:

THC DE = THC destruction efficiency, percent.
 CO = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.
 CO₂ = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.
 THC = Total hydrocarbon concentration at the combustion device outlet, parts per

million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

§63.8688 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To determine the 3-hour average, you must:

(i) Have a minimum of four successive cycles of operation to have a valid hour of data.

(ii) Have valid data from at least three of four equally spaced data values for that hour from a CPMS that is not out-of-control according to your site-specific monitoring plan.

(iii) Determine the 3-hour average of all recorded readings for each operating day, except as stated in §63.8690(c). You must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).

(3) You must record the results of each inspection,

calibration, and validation check.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) of this section and the following:

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.

(3) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

(4) Perform an accuracy check at least semiannually or following an operating parameter deviation:

(i) According to the procedures in the manufacturer's documentation; or

(ii) By comparing the sensor output to redundant sensor output; or

(iii) By comparing the sensor output to the output from a calibrated temperature measurement device; or

(iv) By comparing the sensor output to the output from a temperature simulator.

(5) Conduct accuracy checks any time the sensor

exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(6) At least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

(c) For each pressure measurement device, you must meet the requirements of paragraph (a) of this section and the following:

(1) Locate the pressure sensor(s) in, or as close as possible, to a position that provides a representative measurement of the pressure.

(2) Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range.

(3) Check pressure tap pluggage daily. Perform an accuracy check at least quarterly or following an operating parameter deviation:

(i) According to the procedures in the manufacturer's documentation; or

(ii) By comparing the sensor output to redundant sensor output.

(4) Conduct calibration checks any time the sensor

exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(5) At least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(6) At least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

(d) For monitoring parameters other than temperature and pressure drop, you must install and operate a CPMS to provide representative measurements of the monitored parameters.

(e) For each flare, you must install a device (including but not limited to a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of a pilot flame.

(f) As an option to installing the CPMS specified in paragraph (a) of this section, you may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in §63.8 and the applicable performance specifications of 40 CFR part 60, appendix B.

(g) For each monitoring system required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

(1) Installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(h) In your site-specific monitoring plan, you must also address the following:

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8);

(2) Ongoing data quality assurance procedures in

accordance with the general requirements of §63.8(d); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(i) You must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with your site-specific monitoring plan.

(j) You must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

§63.8689 How do I demonstrate initial compliance with the emission limitations?

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 4 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.8687 and Table 3 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in

§63.8692(e).

Continuous Compliance Requirements

§63.8690 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

§63.8691 How do I demonstrate continuous compliance with the operating limits?

(a) You must demonstrate continuous compliance with each operating limit in Table 2 to this subpart that applies to you according to test methods specified in Table 5 to this subpart.

(b) You must report each instance in which you did not meet each operating limit in Table 5 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.8693.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP.

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the SSMP. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or

malfunction are violations, according to the provisions in §63.6(e).

Notifications, Reports, and Records

§63.8692 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(f), and 63.9(b) through (f) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your affected source before [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the

performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration as specified in Table 3 or 4 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). You must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

(f) If you are using data from a previously-conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, you must submit the test data in lieu of the initial performance test results with the Notification of Compliance Status required under paragraph (e) of this section.

§63.8693 What reports must I submit and when?

(a) You must submit each report in Table 6 to this subpart that applies to you.

(b) Unless the Administrator has approved a

different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 6 to this subpart and according to the following dates:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.8683 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.8683.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.8683.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of

the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the following information:

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS, CEMS, or COMS was out-of-control during the reporting period.

(d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), you must include the information in paragraphs (c)(1) through (6) of this section, and the information in paragraphs (d)(1) through (12) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CPMS, CEMS, or COMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CPMS,

CEMS, or COMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CPMS, CEMS, or COMS downtime during the reporting period and the total duration of CPMS, CEMS, or COMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each air pollutant that was monitored at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CPMS, CEMS, or COMS.

(11) The date of the latest CPMS, CEMS, or COMS certification or audit.

(12) A description of any changes in CPMS, CEMS, or COMS, processes, or controls since the last reporting period.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any

obligation the affected source may have to report deviations from permit requirements to the permit authority.

(f) If acceptable to both the Administrator and you, you may submit reports and notifications electronically.

§63.8694 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity and visible emission observations as required in §63.10(b)(2)(viii).

(b) You must keep the records in §63.6(h)(6) for visible emission observations.

(c) You must keep the records required in Table 5 to this subpart to show continuous compliance with each operating limit that applies to you.

(d) Records of any shared equipment determinations as specified in §63.8682(b).

§63.8695 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§63.8696 What parts of the General Provisions apply to me?

Table 7 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.8697 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by

us, the U.S. Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the following authorities are retained by the Administrator of U.S. EPA:

(1) Approval of alternatives to the requirements in §§63.8681, 63.8682, 63.8683, 63.8684(a) through (c), 63.8686, 63.8687, 63.8688, 63.8689, 63.8690, and 63.8691.

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.8698 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, the General Provisions of this part, and in this section as follows:

Adhesive applicator means the equipment used to apply adhesive to roofing shingles for producing laminated or dimensional roofing shingles.

Asphalt flux means the organic residual material from distillation of crude oil that is generally used in asphalt roofing manufacturing and paving and non-paving asphalt products.

Asphalt loading rack means the equipment at an asphalt processing facility used to transfer oxidized asphalt from a storage tank into a tank truck, rail car, or barge.

Asphalt processing facility means any facility engaged in the preparation of asphalt flux at stand-alone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities. Asphalt preparation, called "blowing," is the oxidation of asphalt flux, achieved by bubbling air through the heated asphalt, to raise the softening point and to reduce penetration of the oxidized asphalt. An asphalt processing facility includes one or

more asphalt flux blowing stills, asphalt flux storage tanks storing asphalt flux intended for processing in the blowing stills, oxidized asphalt storage tanks, and oxidized asphalt loading racks.

Asphalt roofing manufacturing facility means a facility consisting of one or more asphalt roofing manufacturing lines.

Asphalt roofing manufacturing line means the collection of equipment used to manufacture asphalt roofing products through a series of sequential process steps. The equipment that comprises an asphalt roofing manufacturing line varies depending on the type of substrate used (i.e., organic or inorganic) and the final product manufactured (e.g., roll roofing, laminated shingles). For example, an asphalt roofing manufacturing line that uses fiberglass mat as a substrate typically would not include a saturator/wet looper (or the saturator/wet looper could be bypassed if the line manufacturers multiple types of products). An asphalt roofing manufacturing line can include a saturator (including wet looper), coater, coating mixers, sealant applicators, adhesive applicators, and asphalt storage and process tanks. The number of asphalt roofing

manufacturing lines at a particular facility is determined by the number of saturators (or coaters) operated in parallel. For example, an asphalt roofing manufacturing facility with two saturators (or coaters) operating in parallel would be considered to have two separate roofing manufacturing lines.

Asphalt storage tank means any tank used to store asphalt flux, oxidized asphalt, and modified asphalt, at asphalt roofing manufacturing facilities, petroleum refineries, and asphalt processing facilities. Storage tanks containing cutback asphalts (asphalts diluted with solvents to reduce viscosity for low temperature applications) and emulsified asphalts (asphalts dispersed in water with an emulsifying agent) are not subject to this subpart.

Blowing still means the equipment in which air is blown through asphalt flux to change the softening point and penetration rate of the asphalt flux, creating oxidized asphalt.

Boiler means any enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator.

Coater means the equipment used to apply amended

(filled or modified) asphalt to the top and bottom of the substrate (typically fiberglass mat) used to manufacture shingles and rolled roofing products.

Coating mixer means the equipment used to mix coating asphalt and a mineral stabilizer, prior to applying the stabilized coating asphalt to the substrate.

Combustion device means an individual unit of equipment such as a flare, incinerator, process heater, or boiler used for the combustion of organic hazardous air pollutant vapors.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit), or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard

in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or visible emission limit.

Group 1 asphalt loading rack means an asphalt loading rack loading asphalt with a maximum temperature of 260 °C (500 °F) or greater or with a maximum true vapor pressure of 10.4 kiloPascals (kPa)(1.5 pounds per square inch absolute (psia)) or greater.

Group 2 asphalt loading rack means an asphalt loading rack loading asphalt with a maximum temperature less than 260 °C (500 °F) or with a maximum true vapor pressure less than 10.4 kPa, 1.5 psia.

Group 1 asphalt storage tank means an asphalt storage tank that meets both of the following two criteria:

(1) Has a capacity of 177 cubic meters (47,000 gallons) of asphalt or greater; and

(2) Stores asphalt at a maximum temperature of 260 °C (500 °F) or greater, or has a maximum true vapor pressure of 10.4 kPa, (1.5, psia) or greater.

Group 2 asphalt storage tank means any asphalt storage tank with a capacity of 1.93 megagrams (Mg) of asphalt or greater that is not a Group 1 asphalt storage tank.

Incinerator means an enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one manufactured or assembled unit with the combustion section; rather, the energy recovery section is a separate section following the combustion section and the two are joined by ducts or connections carrying flue gas.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the stored asphalt at its maximum storage temperature.

Modified asphalt means asphalt that has been mixed with polymer modifiers.

Oxidized asphalt means asphalt that has been prepared by passing air through liquid asphalt flux in a blowing still.

Process heater means an enclosed combustion device that primarily transfers heat liberated by burning fuel

directly to process streams or to heat transfer liquids other than water.

Research and development equipment means any equipment whose primary purpose is to conduct research and development to develop new processes and products, where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Responsible official means responsible official as defined in 40 CFR 70.2.

Saturator means the equipment in which substrate (predominantly organic felt) is filled with asphalt. Saturators are predominantly used for the manufacture of saturated felt products. The term saturator includes the saturator and wet looper.

Sealant applicator means the equipment used to apply a sealant strip to a roofing product. The sealant strip is used to seal overlapping pieces of roofing product after they have been applied.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h)

of the Clean Air Act.

Tables to Subpart LLLLL of Part 63

Table 1 to Subpart LLLLL of Part 63--Emission Limitations

For . . .	You must meet the following emission limitation . . .
<p>1. Each blowing still, Group 1 asphalt loading rack, and Group 1 asphalt storage tank at existing, new, and reconstructed asphalt processing facilities;</p>	<p>a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen;</p>
<p>and</p>	<p>b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent;</p>
<p>Each Group 1 asphalt storage tank at existing, new, and reconstructed roofing manufacturing lines;</p>	<p>c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a total hydrocarbon (THC) destruction efficiency of 95.8 percent;</p>
<p>and</p>	<p>d. Route the emissions to a boiler or process heater with a design heat input capacity of 44 megawatts (MW) or greater;</p>
<p>Each coating mixer, saturator (including wet looper), coater, sealant applicator, adhesive applicator, and Group 1 asphalt storage tank at new and reconstructed asphalt roofing manufacturing lines.</p>	<p>e. Introduce the emissions into the flame zone of a boiler or process heater; or</p>
	<p>f. Route emissions to a flare meeting the requirements of §63.11(b).</p>

2. The total emissions from the coating mixer, saturator (including wet looper), coater, sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line.^a

a. Limit particulate matter emissions to 0.04 kilograms per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced; or

b. Limit particulate matter emissions to 0.4 kg/Mg (0.8 lb/ton) of saturated felt or smooth-surfaced roll roofing produced.

3. Each saturator (including wet looper) and coater at existing, new, and reconstructed asphalt roofing manufacturing lines.^a

a. Limit exhaust gases to 20 percent opacity; and

b. Limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.

4. Each Group 2 asphalt storage tank at existing, new, and reconstructed asphalt processing facility and asphalt roofing manufacturing lines.^a

Limit exhaust gases to 0 percent opacity^b.

^aAs an alternative to meeting the particulate matter and opacity limits, these emission sources may comply with the THC percent reduction or combustion efficiency standards.

^bThe opacity limit can be exceeded for on consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed. If the emissions from the asphalt storage tank are ducted to the saturator control device, the combined emissions from the saturator and storage tank must meet the 20 percent opacity limit (specified in 4.a of table 1) during this 15-minute period. At any other time, the opacity limit applies to

Group 2 asphalt storage tanks.

Table 2 to Subpart LLLLL of Part 63--Operating Limits

For . . .	You must ^a . . .
1. Non-flare combustion devices with a design heat input capacity less than 44 MW or where the emissions are not introduced into the flame zone.	Maintain the 3-hour average ^b combustion zone temperature at or above the operating limit established during the performance test.
2. Flares.	Meet the operating requirements specified in §63.11(b).
3. Control devices used to comply with the particulate matter standards.	<p>a. Maintain the 3-hour average^b inlet gas temperature at or below the operating limit established during the performance test; and</p> <p>b. Maintain the 3-hour average^b pressure drop across the device^c at or below the operating limit established during the performance test.</p>
4. Control devices other than combustion devices or devices used to comply with the particulate matter emission standards.	Maintain the approved monitoring parameters within the operating limits established during the performance test.

^aThe operating limits specified in Table 2 are applicable if you are monitoring control device operating parameters to demonstrate continuous compliance. If you are using a CEMS or COMS, you must maintain emissions below the value established during the initial performance test.

^bA 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.

^cAs an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP. If this option is selected, the ESP voltage must be maintained at or above the operating limit established during the performance test.

Table 3 to Subpart LLLLL of Part 63--Requirements for Performance Tests^{a,b}

For . . .	You must . . .	Using . . .	According to the following requirements . . .
1. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.	a. Select sampling port's location and the number of traverse points.	i. EPA test method 1 or 1A in appendix A to part 60 of this chapter.	A. For demonstrating compliance with the total hydrocarbon percent reduction standard, the sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere.

B. For demonstrating compliance with the particulate matter mass emission rate, THC destruction efficiency, THC outlet concentration, or combustion efficiency standards, the sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

2. All particulate matter and total hydrocarbon tests.	Determine velocity and volumetric flow rate.	EPA test method 2, 2A, 2C, 2D, 2F, or 2G, as appropriate, in appendix A to part 60 of this chapter.
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3. All particulate matter and total hydrocarbon tests.	Determine the gas molecular weight used for flow rate determination.	EPA test method 3, 3A, 3B, as appropriate, in appendix A to part 60 of this chapter.
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4. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.	Measure moisture content of the stack gas.	EPA test method 4 in appendix A to part 60 of this chapter.
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5. All particulate matter emission tests.	Measure the asphalt processing rate or the asphalt roofing manufacturing rate and the asphalt content of the product manufactured, as appropriate.
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6. Each control device used to comply with the particulate matter emission standards.	Measure the concentration of particulate matter.	EPA test method 5A in appendix A to part 60 of this chapter.	For demonstrating compliance with the particulate matter standard, the performance tests must be conducted under normal operating conditions and while manufacturing the roofing product that is expected to result in the greatest amount of hazardous air pollutant emissions.
7. All opacity tests.	Conduct opacity observations.	EPA test method 9 in appendix A to part 60 of this chapter.	Conduct opacity observations for at least 3 hours and obtain 30, 6-minute averages.
8. All visible emission tests.	Conduct visible emission observations .	EPA test method 22 in appendix A to part 60 of this chapter.	Modify EPA test method 22 such that readings are recorded every 15 seconds for a period of consecutive observations totaling 60 minutes.
9. Each combustion device used to comply with the combustion efficiency or THC standards.	a. Measure the concentration of carbon dioxide.	EPA test method 3A in appendix A to part 60 of this chapter.	

	b. Measure the concentration of carbon monoxide.	EPA test method 10 in appendix A to part 60 of this chapter.
	c. Measure the concentration of total hydrocarbons.	EPA test method 25A in appendix A to part 60 of this chapter.
10. Each control device used to comply with the THC reduction efficiency or outlet concentration standards.	Measure the concentration of total hydrocarbons.	EPA test method 25A in appendix A to part 60 of this chapter.

11. Each combustion device.	Establish a site-specific combustion zone temperature limit.	Data from the CPMS and the applicable performance test method(s).	You must collect combustion zone temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average combustion zone temperature over the 3-hour performance test by computing the average of all of the 15-minute readings.
12. Each control device used to comply with the particulate matter emission standards.	<p>a. Establish a site-specific inlet gas temperature limit; and</p> <p>b. Establish a site-specific limit for the pressure drop across the device.</p>	Data from the CPMS and the applicable performance test method(s).	You must collect the inlet gas temperature and pressure drop ^b data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average inlet gas temperature and pressure drop ^c over the 3-hour performance test by computing the average of all of the 15-minute readings.

13. Each control device other than a combustion device or device used to comply with the particulate matter emission standards.	Establish site-specific monitoring parameters.	Process data and data from the CPMS and the applicable performance test method(s).	You must collect monitoring parameter data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average monitoring parameter values over the 3-hour performance test by computing the average of all of the 15-minute readings.
14. Each flare used to comply with the THC percent reduction or PM emission limits.	Assure that the flare is operated and maintained in conformance with its design.	The requirements of §63.11(b).	

^aAs specified in §63.8687(e), you may request that data from a previously-conducted emission test serve as documentation of conformance with the emission standards and operating limits of this subpart.

^bPerformance tests are not required if: (1) the emissions are routed to a boiler or process heater with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.

^cAs an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP.

Table 4 to Subpart LLLLL to Part 63--Initial Compliance With Emission Limitations

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Each blowing still, Group 1 asphalt loading rack, and Group 1 asphalt storage tank, at existing, new, and reconstructed asphalt processing facilities;.	a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.	<p>i. The total hydrocarbon emissions, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test are reduced by at least 95 percent by weight or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; and</p> <p>ii. You have a record of the average control device operating parameters^a over the performance test during which emissions were reduced according to 1.a.i. of this table.</p>

b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.

i. The combustion efficiency of the combustion device, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test is at least 99.5 percent; and

ii. You have a record of the average combustion zone temperature^a and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the combustion efficiency was at least 99.5 percent.

c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a THC destruction efficiency of 95.8 percent.

i. The THC destruction efficiency of the combustion device, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test is at least 95.8 percent; and

ii. You have a record of the average combustion zone temperature^a and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the THC destruction efficiency was at least 95.8 percent.

d. Route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater.

You have a record of the boiler or process heater design heat capacity.

	e. Introduce the emissions into the flame zone of a boiler or process heater.	You have a record that shows the emissions are being introduced into the boiler or process heater flame zone.
	f. Route emissions to a flare meeting the requirements of §63.11(b).	You have a record of the flare design and operating requirements.
2. Each coating mixer, saturator (including wet looper), coater, sealant applicator, adhesive applicator, and Group 1 asphalt storage tank at new and reconstructed asphalt roofing manufacturing lines.	a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.	See 1.a.i. and ii. of this table.
	b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.	See 1.b.i. and ii. of this table.

c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a THC destruction efficiency of 95.8 percent.	See 1.c.i. and ii. of this table.
d. Route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater.	See 1.d. of this table.
e. Introduce the emissions into the flame zone of a boiler or process heater.	See 1.e. of this table.
f. Route emissions to a flare meeting the requirements of §63.11(b).	See 1.f. of this table.

3. The total emissions from the coating mixer, saturator (including wet looper), coater, sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line.

a. Limit PM emissions to 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

i. The PM emissions, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test are no greater than the applicable emission limitation; and

ii. You have a record of the average control device^a or process parameters over the performance test during which the particulate matter emissions were no greater than the applicable emission limitation.

b. Limit PM emissions to 0.4 kg/Mg (0.8 lb/ton) of saturated felt or smooth-surfaced roll roofing produced.

See 3.a.i. and ii. of this table.

4. Each saturator (including wet looper) and coater at an existing, new, or reconstructed asphalt roofing manufacturing line.	a. Limit visible emissions from the emissions capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.	The visible emissions, measured using EPA test method 22, for any period of consecutive valid observations totaling 60 minutes during the initial compliance period described in §63.8686(b) do not exceed 20 percent.
	b. Limit opacity emissions to 20 percent.	The opacity, measured using EPA test method 9, for each of the first 30 6-minute averages during the initial compliance period described in §63.8686(b) does not exceed 20 percent.
5. Each Group 2 asphalt storage tank at existing, new, and reconstructed asphalt processing facilities and asphalt roofing manufacturing lines.	Limit exhaust gases to 0 percent opacity.	The opacity, measured using EPA test method 9, for each of the first 30 6-minute averages during the initial compliance period described in §63.8686(b) does not exceed 0 percent.

^aIf you use a CEMS or COMS to demonstrate compliance with the emission limits, you are not required to record control device operating parameters.

Table 5 to Subpart LLLLL of Part 63--Continuous Compliance with Operating Limits^a

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
1. Each non-flare combustion device ^b .	a. Maintain the 3-hour ^c average combustion zone temperature at or above the operating limit established during the performance test.	i. Passing the emissions through the control device; and ii. Collecting the combustion zone temperature data according to §63.8688(b); and iii. Reducing combustion zone temperature data to 3-hour ^c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the 3-hour ^c average combustion zone temperature within the level established during the performance test.
2. Each flare.	Meet the operating requirements specified in §63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.

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|---|--|---|
| 3. Control devices used to comply with the particulate matter emission standards. | a. Maintain the 3-hour ^c average inlet gas temperature and pressure drop across device ^d at or below the operating limits established during the performance test. | i. Passing the emissions through the control device; and

ii. Collecting the inlet gas temperature and pressure drop ^d data according to §63.8688(b) and (c); and

iii. Reducing inlet gas temperature and pressure drop ^d data to 3-hour ^c averages according to calculations in Table 3 to this subpart; and

iv. Maintaining the 3-hour ^c average inlet gas temperature and pressure drop ^d within the level established during the performance test. |
|---|--|---|
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|---|---|--|
| <p>4. Control devices other than combustion devices or devices used to comply with the particulate matter emission standards.</p> | <p>a. Maintain the monitoring parameters within the operating limits established during the performance test.</p> | <p>i. Passing the emissions through the control device; and</p> <p>ii. Collecting the monitoring parameter data according to §63.8688(d); and</p> <p>iii. Reducing the monitoring parameter data to 3-hour^c averages according to calculations in Table 3 to this subpart; and</p> <p>iv. Maintaining the monitoring parameters within the level established during the performance test.</p> |
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^aThe operating limits specified in Table 2 and the requirements specified in Table 5 are applicable if you are monitoring control device operating parameters to demonstrate continuous compliance. If you use a CEMS or COMS to demonstrate compliance with the emission limits, you are not required to record control device operating parameters. However, you must maintain emissions below the value established during the initial performance test. Data from the CEMS and COMS must be reduced as specified in §63.9(g).

^bContinuous parameter monitoring is not required if (1) the emissions are routed to a boiler or process heater with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.

^cA 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.

^dAs an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP. If this option is selected, the ESP voltage must be maintained at or above the operating limit established during the performance test.

Table 6 to Subpart LLLLL of Part 63--Requirements for Reports

You must submit	The report must contain ...	You must submit the report ...
1. An initial notification.	The information in §63.9(b).	According to the requirements in §63.9(b).
2. A notification of performance test.	A written notification of the intent to conduct a performance test.	At least 60 calendar days before the performance test is scheduled to begin, as required in §63.9(e).
3. A notification of opacity and visible emission observations.	A written notification of the intent to conduct opacity and visible emission observations.	According to the requirements in §63.9(f).

4. Notification of compliance status.	The information in §63.9(h(2) through (5), as applicable.	According to the requirements in §63.9(h(2) through (5), as applicable.
5. A compliance report.	<p>a. A statement that there were no deviations from the emission limitations during the reporting period, if there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you.</p> <p>b. If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during the which the CPMS, CEMS, or COMS was out-of-control during the reporting period.</p>	<p>Semiannually according to the requirements in §63.8693(b).</p> <p>Semiannually according to the requirements in §63.8693(b).</p>

c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), the report must contain the information in §63.8693(c). If there were periods during which the CPMS, CEMS, or COMS was out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.8693(d).

Semiannually
according to the
requirements in
§63.8693(b).

d. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

Semiannually
according to the
requirements in
§63.8693(b).

6. An immediate The information in §63.10(d)(5)(ii).
startup,
shutdown, and
malfunction
report if you
have a startup,
shutdown, or
malfunction
during the
reporting period
and actions
taken were not
consistent with
your startup,
shutdown, and
malfunction
plan.

By fax or telephone
within 2 working days
after starting
actions inconsistent
with the plan
followed by a letter
within 7 working days
after the end of the
event unless you have
made alternative
arrangements with the
permitting authority.

Table 7 to Subpart LLLLL of Part 63--Applicability of General Provisions to Subpart LLLLL

Citation	Subject	Brief Description	Applies to Subpart LLLLL
§63.1.	Applicability.	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.	Yes.
§63.2.	Definitions.	Definitions for part 63 standards.	Yes.
§63.3.	Units and Abbreviations.	Units and abbreviations for part 63 standards.	Yes.
§63.4.	Prohibited Activities.	Prohibited Activities; Compliance date; Circumvention, Severability.	Yes.
§63.5.	Construction/ Reconstruction.	Applicability; applications; approvals.	Yes.
§63.6(a).	Applicability.	GP apply unless compliance extension GP apply to area sources that become major.	Yes.
§63.6(b) (1)-(4).	Compliance Dates for New and Reconstructed sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes.
§63.6(b) (5).	Notification.	Must notify if commenced construction or reconstruction after proposal.	Yes.

§63.6(b) (6).	[Reserved]		
§63.6(b) (7).	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.	Yes.
§63.6(c) (1)-(2).	Compliance Dates for Existing Sources.	1. Comply according to date in subpart, which must be no later than 3 years after effective date. 2. For section 112(f) standards, comply within 90 days of effective date unless compliance extension has been granted.	Yes.
§63.6(c) (3)-(4).	[Reserved]		
§63.6(c) (5).	Compliance Dates for Existing Area Sources That Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes.
§63.6(d).	[Reserved]		

§63.6(e) (1).	Operation & Maintenance.	1. Operate to minimize emissions at all times.	Yes.
		2. Correct malfunctions as soon as practicable.	
		3. Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	
§63.6(e)(2)	[Reserved]		
§63.6(e) (3)	Startup, Shutdown, and Malfunction (SSM) Plan (SSMP).	1. Requirement for SSM and startup, shutdown, malfunction plan	Yes.
		2. Content of SSMP.	
§63.6(f) (1).	Compliance Except During SSM.	You must comply with emission standards at all times except during SSM.	Yes.
§63.6(f) (2)-(3).	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
§63.6(g) (1)-(3).	Alternative Nonopacity Standard.	Procedures for getting an alternative nonopacity standard.	Yes.

§63.6(h).	Opacity/Visible Emission (VE) Standards.	Requirements for opacity and VE limits.	Yes.
§63.6(h)(1).	Compliance with Opacity/VE Standards.	You must comply with opacity/VE emission limitations at all times except during SSM.	Yes.
§63.6(h)(2)(i).	Determining Compliance with Opacity/VE Standards.	If standard does not state test method, use EPA test method 9, 40 CFR 60, appendix A for opacity and EPA test method 22, 40 CFR 60, appendix A for VE.	No. The test methods for opacity and visible emissions are specified in §63.8687.
§63.6(h)(2)(ii).	[Reserved]		
§63.6(h)(2)(iii).	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards.	Criteria for when previous opacity/VE testing can be used to show compliance with this rule.	Yes.
§63.6(h)(3).	[Reserved]		
§63.6(h)(4).	Notification of Opacity/VE Observation Date.	Must notify Administrator of anticipated date of observation.	Yes.
§63.6(h)(5)(i), (iii)-(v).	Conducting Opacity/VE Observations.	Dates and Schedule for conducting opacity/VE observations.	Yes.

§63.6(h) (5)(ii).	Opacity Test Duration and Averaging Times.	Must have at least 3 hours of observation with thirty 6- minute averages.	Yes.
§63.6(h) (6).	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect.	Yes.
§63.6(h) (7)(i).	Report COMS Monitoring Data from Performance Test.	Must submit COMS data with other performance test data.	Yes, if COMS used.
§63.6(h) (7)(ii).	Using COMS instead of EPA test method 9, 40 CFR 60, appendix A.	Can submit COMS data instead of EPA test method 9, 40 CFR 60, appendix A results even if rule requires EPA test method 9, 40 CFR 60, appendix A, but must notify Administrator before performance test.	Yes, if COMS used.
§63.6(h) (7)(iii).	Averaging time for COMS during performance test.	To determine compliance, must reduce COMS data to 6-minute averages.	Yes, if COMS used.
§63.6(h) (7)(iv).	COMS requirements.	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e), COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d).	Yes, if COMS used.

§63.6(h) (7)(v).	Determining Compliance with Opacity/VE Standards.	COMS is probative but not conclusive evidence of compliance with opacity standard, even if EPA test method 9, 40 CFR 60, appendix A observation shows otherwise. Requirements for COMS to be probative evidence, proper maintenance, meeting PS 1, and data have not been altered.	Yes, if COMS used.
§63.6(h) (8).	Determining Compliance with Opacity/VE Standards.	Administrator will use all COMS, EPA test method 9, 40 CFR 60, appendix A, and EPA test method 22, 40 CFR 60, appendix A results, as well as information about operation and maintenance to determine compliance.	Yes.
§63.6(h) (9).	Adjusted Opacity Standard.	Procedures for Administrator to adjust an opacity standard.	Yes.
§63.6(i).	Compliance Extension.	Procedures and criteria for Administrator to grant compliance extension.	Yes.
§63.6(j)	Presidential Compliance Exemption.	President may exempt source category from requirement to comply with rule.	Yes.

§63.7(a) (1)-(2).	Performance Test Dates.	Dates for conducting initial performance testing and other compliance demonstrations. Must conduct 180 days after first subject to rule.	Yes.
§63.7(a) (3).	Section 114 Authority.	Administrator may require a performance test under CAA section 114 at any time.	Yes.
§63.7(b) (1).	Notification of Performance Test.	Must notify Administrator 60 days before the test.	Yes.
§63.7(b) (2).	Notification of Rescheduling.	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes.
§63.7(c).	Quality Assurance/ Test Plan.	<p>1. Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with:</p> <p>2. Test plan approval procedures.</p> <p>3. Performance audit requirements.</p> <p>4. Internal and external QA procedures for testing.</p>	Yes.
§63.7(d).	Testing Facilities.	Requirements for testing facilities.	Yes.

§63.7(e) (1).	Conditions for Conducting Performance Tests.	1. Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM.	Yes.
		2. Not a violation to exceed standard during SSM.	
§63.7(e) (2).	Conditions for Conducting Performance Tests.	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes.
§63.7(e) (3).	Test Run Duration.	1. Must have three test runs of at least 1 hour each.	Yes.
		2. Compliance is based on arithmetic mean of three runs.	
		3. Conditions when data from an additional test run can be used.	
§63.7(f).	Alternative Test Method.	Procedures by which Administrator can grant approval to use an alternative test method.	Yes.

§63.7(g).	Performance Test Data Analysis.	1. Must include raw data in performance test report.	Yes.
		2. Must submit performance test data 60 days after end of test with the Notification of Compliance Status.	
		3. Keep data for 5 years.	
§63.7(h).	Waiver of Tests.	Procedures for Administrator to waive performance test.	Yes.
§63.8(a)(1).	Applicability of Monitoring Requirements.	Subject to all monitoring requirements in standard.	Yes.
§63.8(a)(2).	Performance Specifications.	Performance Specifications in appendix B of part 60 apply.	Yes, if CEMS used.
§63.8(a)(3).	[Reserved]		
§63.8(a)(4).	Monitoring with Flares.	Unless your rule says otherwise, the requirements for flares in §63.11 apply.	Yes.
§63.8(b)(1).	Monitoring.	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes.

§63.8(b) (2)-(3).	Multiple Effluents and Multiple Monitoring Systems.	<p>1. Specific requirements for installing monitoring systems.</p> <p>2. Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise.</p> <p>3. If more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.</p>	Yes.
§63.8(c) (1).	Monitoring System Operation and Maintenance.	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes.
§63.8(c) (1)(i).	Routine and Predictable CMS malfunction.	<p>1. Follow the SSM plan for routine repairs.</p> <p>2. Keep parts for routine repairs readily available.</p> <p>3. Reporting requirements for CMS malfunction when action is described in SSM plan.</p>	Yes.

§63.8(c) (1)(ii).	CMS malfunction not in SSP plan.	Reporting requirements for CMS malfunction when action is not described in SSM plan.	Yes.
§63.8(c) (1)(iii).	Compliance with Operation and Maintenance Requirements.	1. How Administrator determines if source complying with operation and maintenance requirements. 2. Review of source O&M procedures, records, manufacturer's instructions, recommendations, and inspection of monitoring system.	Yes.
§63.8(c) (2)-(3).	Monitoring System Installation.	1. Must install to get representative emission and parameter measurements. 2. Must verify operational status before or at performance test.	Yes.
§63.8(c) (4).	CMS Requirements.	CMS must be operating except during breakdown, out-of- control, repair, maintenance, and high-level calibration drifts.	No; §63.8690 specifies the CMS requirements.

§63.8(c) (4)(i)- (ii).	CMS Requirements.	1. COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. 2. CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	Yes, if COMS used.
§63.8(c) (5).	COMS Minimum Procedures.	COMS minimum procedures.	Yes.
§63.8(c) (6).	CMS Requirements.	Zero and High level calibration check requirements.	No; §63.8688 specifies the CMS requirements.
§63.8(c) (7)-(8).	CMS Requirements.	Out-of-control periods, including reporting.	Yes.
§63.8(d).	CMS Quality Control.	1. Requirements for CMS quality control, including calibration, etc. 2. Must keep quality control plan on record for the life of the affected source. 3. Keep old versions for 5 years after revisions.	No; §63.8688 specifies the CMS requirements.

§63.8(e).	CMS Performance Evaluation.	Notification, performance evaluation test plan, reports.	No; §63.8688 specifies the CMS requirements.
§63.8(f)(1)-(5).	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes.
§63.8(f)(6).	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy tests for CEMS.	Yes, if CEMS used.
§63.8(g)(1)-(4).	Data Reduction.	1. COMS 6-minute averages calculated over at least 36 evenly spaced data points. 2. CEMS 1-hour averages computed over at least 4 equally spaced data points.	Yes, if CEMS or COMS used.
§63.8(g)(5).	Data Reduction.	Data that cannot be used in computing averages for CEMS.	No; §63.8690 specifies the CMS requirements.
§63.9(a).	Notification Requirements.	Applicability and State Delegation.	Yes.

§63.9(b) (1)-(5).	Initial Notifications.	1. Submit notification 120 days after effective date.	Yes.
		2. Notification of intent to construct/reconstruct; notification of commencement of construct/reconstruct; notification of startup	
		3. Contents of each.	
§63.9(c).	Request for Compliance Extension.	Can request if cannot comply by date or if installed Best Achievable Control Technology (BACT)/Lowest Achievable Emission Rate (LAER).	Yes.
§63.9(d).	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.	Yes.
§63.9(e).	Notification of Performance Test.	Notify Administrator 60 days prior.	Yes.
§63.9(f).	Notification of VE/Opacity Test.	Notify Administrator 30 days prior.	Yes.

§63.9(g).	Additional Notifications When Using CMS.	1. Notification of performance evaluation.	No; §63.8692 specifies the CMS notification requirements.
		2. Notification using COMS data.	
		3. Notification that the criterion for use of alternative to relative accuracy testing was exceeded.	
§63.9(h) (1)-(6).	Notification of Compliance Status.	1. Contents.	Yes.
		2. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after.	
		3. When to submit to Federal vs. State authority.	
§63.9(i).	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in dates when notifications must be submitted.	Yes.
§63.9(j).	Change in Previous Information.	Must submit within 15 days after the change.	Yes.

§63.10(a).	Recordkeeping/ Reporting.	1. Applies to all, unless compliance extension.	Yes.
		2. When to submit to Federal vs. State authority.	
		3. Procedures for owners of more than 1 source.	
§63.10(b) (1).	Recordkeeping/ Reporting.	1. General Requirements.	Yes.
		2. Keep all records readily available.	
		3. Keep for 5 years.	
§63.10(b) (2)(i)- (v).	Records related to Startup, Shutdown, and Malfunction.	1. Occurrence of each of operation (process equipment).	Yes.
		2. Occurrence of each malfunction of air pollution equipment.	
		3. Maintenance on air pollution control equipment.	
		4. Actions during startup, shutdown, and malfunction.	
§63.10(b) (2)(vi) and (x- xi).	CMS Records.	1. Malfunctions, inoperative, out-of-control.	Yes.
		2. Calibration checks.	
		3. Adjustments, maintenance.	

§63.10(b) (2)(vii)- (ix).	Records.	1. Measurements to demonstrate compliance with emission limitations	Yes.
		2. Performance test, performance evaluation, and visible emission observation results	
		3. Measurements to determine conditions of performance tests and performance evaluations.	
§63.10(b) (2)(xii).	Records.	Records when under waiver.	Yes.
§63.10(b) (2)(xiii).	Records.	Records when using alternative to relative accuracy test.	Yes.
§63.10(b) (2) (xiv).	Records.	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes.
§63.10(b) (3).	Records.	Applicability determinations.	Yes.
§63.10(c) (1)- (6), (9)- (15).	Records.	Additional records for CMS.	No; §63.8694 specifies the CMS recordkeeping requirements.

§63.10(c) (7)-(8).	Records.	Records of excess emissions and parameter monitoring exceedances for CMS.	No; §63.8694 specifies the CMS recordkeeping requirements.
§63.10(d) (1).	General Reporting Requirements.	Requirement to report.	Yes.
§63.10(d) (2).	Report of Performance Test Results.	When to submit to Federal or State authority.	Yes.
§63.10(d) (3).	Reporting Opacity or VE Observations.	What to report and when.	Yes.
§63.10(d) (4).	Progress Reports.	Must submit progress reports on schedule if under compliance extension.	Yes.
§63.10(d) (5).	Startup, Shutdown, and Malfunction Reports.	Contents and submission.	Yes.
§63.10(e) (1)(2).	Additional CMS Reports.	1. Must report results for each CEM on a unit 2. Written copy of performance evaluation 3. Three copies of COMS performance evaluation	Yes.
§63.10(e) (3).	Reports.	Excess emission reports.	No; §63.8693 specifies the reporting requirements.

§63.10(e) (3)(i- iii).	Reports.	Schedule for reporting excess emissions and parameter monitor exceedances (now defined as deviations).	No; §63.8693 specifies the reporting requirements.
§63.10(e) (3) (iv- v).	Excess Emissions Reports.	<p>1. Requirement to revert to the frequency specified in the relevant standard if there is an excess emissions and parameter monitor exceedances (now defined as deviations).</p> <p>2. Provision to request semiannual reporting after compliance for one year.</p> <p>3. Submit report by 30th day following end of quarter or calendar half.</p> <p>4. If there has not been an exceedance or excess emission (now defined as deviations), report content is a statement that there have been no deviations.</p>	No; §63.8693 specifies the reporting requirements.
§63.10(e) (3)(iv-v).	Excess Emissions Reports.	Must submit report containing all of the information in §63.10(c)(5)(13), §63.8(c)(7)-(8).	No; §63.8693 specifies the reporting requirements.

§63.10(e) (3)(vi- viii).	Excess Emissions Report and Summary Report.	1. Requirements for reporting excess emissions for CMS (now called deviations). 2. Requires all of the information in §63.10(c)(5)(13), §63.8(c)(7)-(8).	No; §63.8693 specifies the reporting requirements.
§63.10(e) (4).	Reporting COMS data.	Must submit COMS data with performance test data.	Yes, if COMS used.
§63.10(f).	Waiver for Recordkeeping/ Reporting.	Procedures for Administrator to waive.	Yes.
§63.11.	Flares.	Requirements for flares.	Yes.
§63.12.	Delegation.	State authority to enforce standards.	Yes.
§63.13.	Addresses.	Addresses where reports, notifications, and requests are sent.	Yes.
§63.14.	Incorporation by Reference.	Test methods incorporated by reference.	Yes.
§63.15.	Availability of Information.	Public and confidential information.	Yes.